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THE  
ARKANSAS  
INDUSTRIAL  
UNIVERSITY

~~UNIVERSITY~~  
1890-91.

1890/91 - 1891/92



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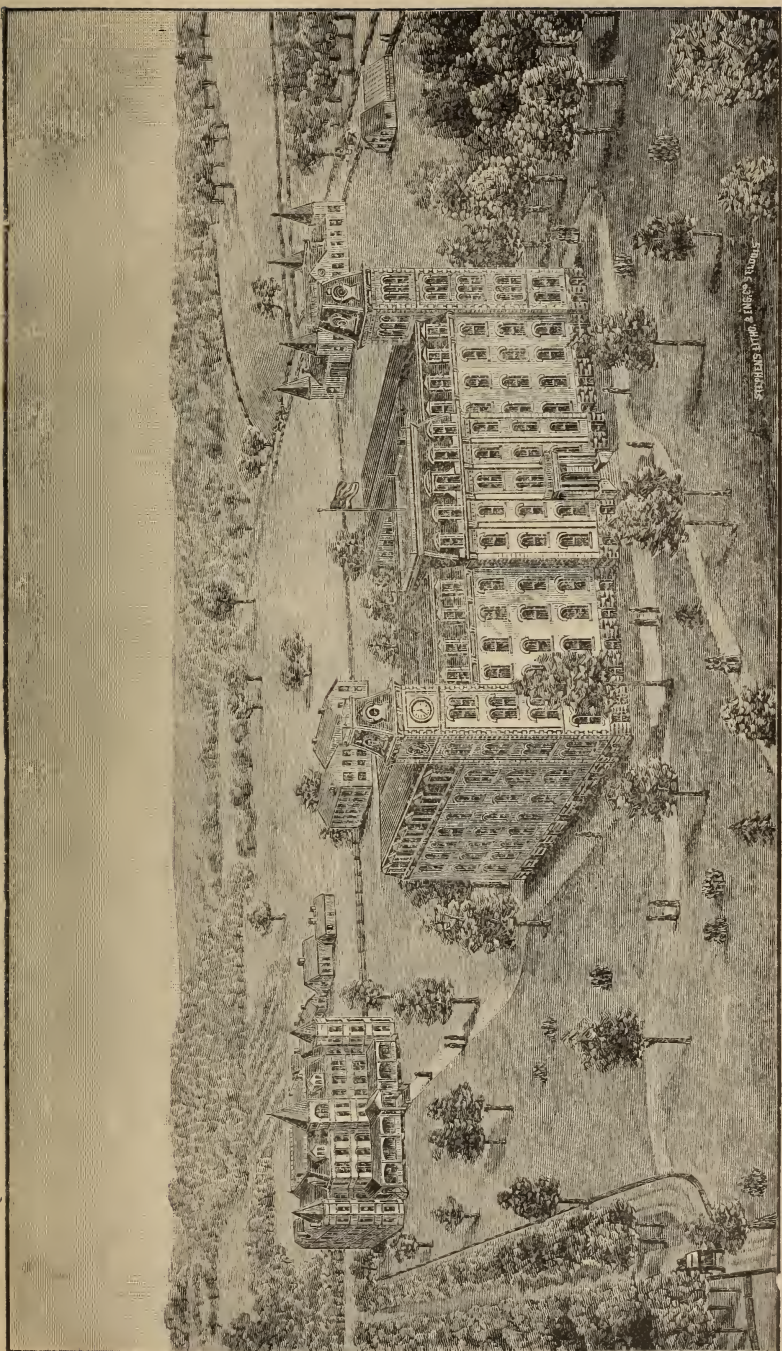












THE UNIVERSITY OF CHICAGO





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EIGHTEENTH CATALOGUE

OF THE

ARKANSAS

Industrial University

FAYETTEVILLE, WASHINGTON CO., ARK.

FOR THE

YEAR ENDING DECEMBER 4, 1890,

AND

ANNOUNCEMENT FOR 1891





# UNIVERSITY BUILDINGS.

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The main University building, see frontispiece, is a magnificent structure of brick, three stories in height, with a stone basement and mansard roof. It occupies three sides of a quadrangle, and has a frontage of 214 feet.

In the north wing are situated the Chapel on the first floor, the Library on the second, and the Engineering Drawing Room on the third; in the south wing, the Preparatory Hall on the first floor, the College Hall and Drafting Room on the second, and the Museum on the third.

The main front of the building is divided into offices, recitation rooms, and laboratories. The offices of the President and the Commandant, and the rooms of the Preparatory and Musical Departments are on the first floor, the Departments of Mathematics, Engineering and Physics, Ancient and Modern Languages, and Pedagogics, have convenient rooms on the second floor, while the Departments of Agriculture and Chemistry and Biology and Geology, are accommodated on the third floor. Above, on the fourth floor, are the commodious and well-furnished halls of the Literary societies.

This building covers an area of 26,108 square feet, and contains *seventy* rooms, together with broad corridors and ample stairways. As a safeguard against fire, and to insure uniform temperature, the entire building is heated throughout by steam.

The new Dormitory, see page 34, in accordance with legislative enactment, was erected by the Board of Trustees in 1887, and opened to the use of students in the Spring of 1888.

It is a substantial brick building three stories high, containing over forty rooms. In finish and appearance, both externally and internally, it is a model structure. The rooms are large, airy, well ventilated and lighted, and open into broad corridors extending lengthwise through the building. The entrances are five in number; three in front, which open upon a broad veranda, and two in the rear. As to location, every precaution has been taken to insure good health to its occupants. That proper care may be exercised a member of the teaching body resides here with his family, and the University Faculty make a regular tour of inspection. In this building the *electric light* has been substituted for kerosene lamps, and a source of danger is thus eliminated.

The building of the Agricultural Experiment Station, see page 35, is of brick, one story in height. It contains the office of the Director, the apartments of the Chemist, Horticulturist, Veterinarian and Entomologist, together with a commodious Chemical Laboratory, Weighing-Room and Store-Rooms.

The new Shop Building was erected in the Spring of 1889. It is of corrugated iron, 170 feet long, 40 feet wide, and one story in height, with ample light and ventilation. The Wood-Room is 40x60 feet in size, the Metal-Room 40x40 feet, the Forge-Room 40x25 feet, and the Foundry 40x45 feet.

Connected with the Department of Agriculture is a large Barn, Stock-Shed, Dairy-House, Fruit-House, and other necessary outbuildings.

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Assistant in Preparatory Department.

|| JESSIE L. CRAVENS, B. L.,  
Instructor in Education and Assistant in Preparatory Department.

NANNIE HOXIE PATTERSON,  
Instructor in Music.

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\* Successor to E. W. Simon's, resigned.

† Successor to E. L. Fletcher, resigned.

‡ Successor to H. Edwards, resigned.

§ Successor to W. E. Anders, resigned.

¶ Successor to C. B. Collingwood, resigned.

|| Successor to K. V. King, resigned.



MARY LEVERETT, A. B.,  
Assistant in Preparatory Department.

WILLIAM FERDINAND BATES,  
Foreman of the Farm.

GEORGE PICKETT EUSTACE (Graduate Miller Manual Labor School, Virginia),  
Instructor in Iron Work.

\*R. F. WINSLOW BEARDSLEE (Graduate Chicago Manual Training School),  
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ADDISON C. HOAG,  
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Equity and Corporations.

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HON. J. V. WALKER, A. B.,  
Criminal Law and Criminal Procedure.

F. M. GOAR, LL. B.,  
Common and Statute Law.

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# MEDICAL DEPARTMENT.

SESSION OF 1890-91.

LOCATED AT LITTLE ROCK, ARK.

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## PROFESSORS:

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Emeritus, Practice of Medicine.

EDWIN BENTLY, M. D.,  
Institutes and Practice of Surgery.

JAS. A. DIBRELL, JR., M. D.,  
General, Descriptive and Surgical Anatomy, and President of Faculty.

A. L. BREYSACHER, M. D.,  
Obstetrics and Diseases of Women and Children.

JOHN J. McALMONT, M. D.,  
Materia Medica, Therapeutics, Hygiene and Botany.

JAMES H. SOUTHALL, M. D.,  
Practice of Medicine.

ROSCOE G. JENNINGS, M. D.,  
Clinical Surgery and Dermatology.

JOHN B. BOND, M. D.,  
Medical Chemistry and Toxicology.

L. P. GIBSON, M. D.,  
Demonstrator of Anatomy.

T. E. MURRELL, M. D.,  
Ophthalmology and Otolary.

JAMES H. LENOW, M. D.,  
Diseases of Genito-Urinary Organs.

CLAIBORNE WATKINS, M. D.,  
Physical Diagnosis and Clinical Medicine.

LOUIS R. STARK, M. D.,  
Gynecology.

E. R. DIBRELL, M. D.,  
Institutes of Medicine.

W. H. MILLER, M. D.,  
Prosector of Anatomy.

E. E. MOSS, A. M., L. L. D.,  
Medical Jurisprudence.

All communications should be addressed to

R. G. JENNINGS, M. D.,  
Secretary of Faculty, Little Rock, Ark.

# THE ARKANSAS INDUSTRIAL UNIVERSITY

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## Agricultural Experiment Station.

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### BOARD OF CONTROL.

Agricultural Committee of Board of Trustees.  
President of the University.  
Director of the Station.

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### STATION OFFICERS.

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R. R. DINWIDDIE.....	Veterinarian.
C. W. WOODWORTH .....	Entomologist.
*J. F. McNEIL.....	Horticulturist.
†G. L. TELLER.....	Chemist.
‡F. KILLEN.....	Assistant Chemist.
R. L. BENNETT.....	Assistant at Newport.
§B. M. BAKER.....	Assistant at Pine Bluff.
F. W. BATES.....	Assistant at Fayetteville.

---

\*Vice E. S. Richman, resigned.

†Vice C. B. Collingwood, resigned.

‡Vice G. A. Humphreys, resigned.

§Vice A. F. Cory, resigned.

Address all communications to

DIRECTOR AGRICULTURAL EXPERIMENT STATION,  
FAYETTEVILLE, ARKANSAS.



# CATALOGUE OF STUDENTS.

SESSION 1889-90.

## ABBREVIATIONS.

Ph. D.....	Doctor of Philosophy.
B. A.....	Bachelor of Arts.
C. E.....	Civil Engineering
M. E.....	Mechanical Engineering.
B. S.....	Bachelor of Science.
B. S. A.....	Bachelor of Scientific Agriculture.
L. I.....	Licentiate of Instruction.
Ir.....	Irregular.

## COLLEGIATE DEPARTMENT.

### POST GRADUATES.

NAME.	RESIDENCE.	COURSE.
George W. Droke, A. M.....	Fayetteville, Ark.....	Ph. D.
F. L. Harvey, B. S.....	Orono, Maine.....	Ph. D.
J. Collin Massie, A. B.....	Fayetteville, Ark.....	Ph. D.
Ida Pace, A. B.....	Harrison, Ark.....	Ph. D.
Anna M. Waggener, B. L.....	Fayetteville, Ark.....	Ph. D.
Naomi J. Williams, A. M.....	Fayetteville, Ark.....	Ph. D.
Total.....		6

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NAME.	RESIDENCE.	COURSE.
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Gannaway, John R.....	Warren, Bradley county... ..	B. A.
Hervey, W. Rhodes .....	Santa Ana, California.....	B. S.
Humphreys, Gus A.....	Ft. Smith, Sebastian county.....	B. A.
Morrow, Mattie.....	Fayetteville, Washington county.....	B. S.
Taff, Albert G.....	Fayetteville, Washington county.....	C. E.
Wheeler, John N .....	Warren, Bradley county.....	B. A.
Total .....		

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Horton, Stephen A.....	Fairview, Dallas county.....	B. A.
Humphreys, John T.....	Ft. Smith, Sebastian county.....	Ir.
Leverett, Ammee.....	Fayetteville, Washington county.....	Ir.
Martin, Mack.....	Hackett City, Sebastian county.....	M. E.
Morrison, Marshall.....	Osage Mills, Benton county.....	B. A.
Newman, Andrew J.....	Lonoke, Lonoke county.....	B. A.
Oliver, Wallace.....	Lee's Creek, Crawford county.....	B. A.
Patton, Clyde C.....	Fayetteville, Washington county.....	B. A.
Shreve, A. Walter.....	Farmington, Washington county.....	C. E.
Shreve, Henry B.....	Farmington, Washington county.....	C. E.
Skelton, Gordon V.....	Fayetteville, Washington county.....	C. E.
Williams, Horace E.....	Fayetteville, Washington county.....	C. E.
Total.....		15

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Brown, Eula K.....	Fayetteville, Washington county.....	Ir.
Core, Elias.....	Booneville, Logan county.....	Ir.
Crawford, William A.....	Boonsboro, Washington county.....	B. A.
Curry, Lula.....	Fayetteville, Washington county.....	B. S.
Curry, May.....	Fayetteville, Washington county.....	B. S.
Duke, Annie.....	Fayetteville, Washington county.....	B. S.
Eustace, George P.....	Richmond, Va.....	M. E.
Evin, Addie.....	Boonsboro, Washington county.....	L. I.
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Gallaway, Irene.....	Fayetteville, Washington county.....	L. I.
Hamilton, W. J.....	Hartford, Sebastian county.....	L. I.
Holcomb, Cener.....	Fayetteville, Washington county.....	L. I.
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Norman, George.....	Hamburg, Ashley county.....	B. A.
Patton, William J.....	Fayetteville, Washington county.....	C. E.
Pharr, J. Scott.....	La Grange, Lee county.....	B. A.
Pugh, George.....	Hamburg, Ashley county.....	B. A.
Smith, Stephen K.....	Fayetteville, Washington county.....	C. E.
Vaulx, Julia.....	Fayetteville, Washington county.....	B. A.
Vaulx, Samuel.....	Fayetteville, Washington county.....	B. A.
Wood, Albert C.....	Fayetteville, Washington county.....	C. E.
Wood, Ben F.....	Fayetteville, Washington county.....	C. E.
Total.....		32

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Barr, Ida G.....	Fayetteville, Washington county.....	B. S.
Bibb, Blanche.....	Franklin, Ky.....	B. A.
Braley, Herbert.....	Fayetteville, Washington county.....	B. A.
Brewer, Oliver P.....	Webber's Falls, Ind. Ter.....	B. S.
Brookfield, Ada.....	Wynne, Cross county.....	Ir.
Crawford, Oscar G.....	Springdale, Washington county.....	B. S.
Davies, Elza D.....	Fayetteville, Washington county.....	C. E.
Davies, Hadgie.....	Fayetteville, Washington county.....	B. A.
Duncan, Thomas G.....	Fayetteville, Washington county.....	B. S.
Ellis, Mark S.....	Springdale, Washington county.....	B. A.
Evens, Alexander.....	Boonsboro, Washington county.....	C. E.
Galloway, Paul.....	Fayetteville, Washington county.....	B. S. A.
Greene, Frank.....	Harrison, Boone county.....	B. S.
Griffith, Blanche.....	Fayetteville, Washington county.....	B. A.
Griffith, Gaylord.....	Fayetteville, Washington county.....	B. A.
Gulledge, William T.....	Monticello, Drew county.....	M. E.
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Hedrick, Ira G.....	Robinson, Benton county.....	C. E.
Hoag, Elvero C.....	Fayetteville, Washington county.....	B. A.
Holcomb, R. Bruce.....	Fayetteville, Washington county.....	B. S.
Horton, William S.....	Fairview, Dallas county.....	B. A.
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NAME.	RESIDENCE.	COURSE.
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Medearis, James F.....	Walnut Ridge, Lawrence county.....	B. A.
Moore, Howard.....	Texarkana, Miller county.....	B. A.
Moore, John F.....	Cincinnati, Washington county.....	B. S.
Moore, J. Harvey.....	Cincinnati, Washington county.....	B. S.
Morrow, Sam Y.....	Fayetteville, Washington county.....	B. S. A.
Pace, Henry.....	Harrison, Boone county.....	B. A.
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Rawlings, John O.....	Waldron, Scott county.....	B. A.
Reynolds, Farie.....	Boonsboro, Washington county.....	L. I.
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Russell, Henry B.....	Warren, Bradley county.....	B. S.
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Wainwright, William H.....	Fayetteville, Washington county.....	B. A.
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Bishop, Lillie.....	Fayetteville, Washington county.....	B. S.
Blackmer, Stella.....	Fayetteville, Washington county.....	B. S.
Bolinger, Florence.....	Fayetteville, Washington county.....	B. S.
Boyd, Robert R.....	Paragould, Green county.....	B. S. A.
Braley, Amanda.....	Fayetteville, Washington county.....	B. S.
Braley, Etta L.....	Fayetteville, Washington county.....	B. S.
Brandon, William E.....	Hackett City, Sebastian county.....	B. S.
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Cravens, Harris E.....	Fayetteville, Washington county.....	C. E.
Crawford, Della.....	Fayetteville, Washington county.....	B. S.

NAME.	RESIDENCE.	COURSE.
Crozier, Arthur B.....	Fayetteville, Washington county.....	C. E.
Crozier, John P.....	Fayetteville, Washington county.....	B. S.
Curry, Sarah E.....	Fayetteville, Washington county.....	L. I.
Davies, Clyde.....	Fayetteville, Washington county.....	B. A.
Drummond, Ida.....	Fayetteville, Washington county.....	B. A.
Duckworth, Frank M.....	Hico, Benton county.....	B. S.
Duncan, Samuel K.....	Waldron, Scott county.....	B. S.
Ferguson, Gussie.....	Fayetteville, Washington county.....	B. S.
Finley, Della.....	Fayetteville, Washington county.....	B. S.
Fishback, William M.....	Fort Smith, Sebastian county.....	B. A.
Forsyth, H. L.....	Harmony, Johnson county.....	B. S. A.
Frazier, John.....	Fayetteville, Washington county.....	C. E.
Galloway, Earl.....	Fayetteville, Washington county.....	C. E.
Garnett, Thomas W.....	Portland, Ashley county.....	L. I.
Gates, Nellie.....	Fayetteville, Washington county.....	B. S.
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Grandy, Willis P.....	Monticello, Drew county.....	B. S.
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Harris, Alice.....	Fayetteville, Washington county.....	B. S.
Harris, Rena.....	Fayetteville, Washington county.....	B. S.
Harris, Robert C.....	Fayetteville, Washington county.....	B. S. A.
Hays, Charles E.....	Clarksville, Johnson county.....	B. S.
Hays, Charles M.....	Hackett City, Sebastian county.....	L. I.
Head, James D.....	Richmond, Little River county.....	B. A.
Heberly, Francis X.....	Fayetteville, Washington county.....	B. A.
Hedrick, Otis.....	Robinson, Benton county.....	B. S.
Henry, Francis M.....	Magnet, Hot Spring county.....	B. S. A.
Hensley, J. Wayne.....	Ozark, Franklin county.....	B. S.
Hickman, Thomas E.....	Bradford, White county.....	B. S. A.
Hollis, Carl.....	Orlando, Cleveland county.....	B. S. A.
Hopkins, George T.....	Greensborough, Green county.....	B. S.
Howell, Willey.....	Fayetteville, Washington county.....	B. S. A.
Hudgins, Oscar P.....	Dallas, Polk county.....	B. S. A.
Hunt, Gertie.....	Fayetteville, Washington county.....	L. I.
Hunt, Jimmie.....	Fayetteville, Washington county.....	B. S.
Ingram, Granbury.....	Trident, Benton county.....	C. E.
Jackson, Hugh.....	Fayetteville, Washington county.....	B. S.

NAME.	RESIDENCE.	COURSE.
Jackson, Minnie.....	Clarendon, Monroe county.....	B. S.
Jackson, Oza.....	Fayetteville, Washington county.....	B. S.
James, Aggie.....	Fayetteville, Washington county.....	B. S.
Jarratt, John E.....	Marianna, Lee county.....	B. A.
Johnson, Hugh L.....	Fayetteville, Washington county.....	C. E.
Jones, Isaac D.....	Cove, Polk county.....	L. I.
Jones, John E.....	Fayetteville, Washington county.....	C. E.
Lane, Joe R.....	Mansfield, Sebastian county.....	B. A.
Langston, Wm. H.....	West Fork, Washington county.....	C. E.
Lawrence, L. R.....	Appleton, Pope county.....	B. S. A.
Lee, Eva.....	Fayetteville, Washington county.....	B. S.
Lee, Lillie.....	Fayetteville, Washington county.....	B. S.
Leverett, Abbie.....	Fayetteville, Washington county.....	B. A.
Leverett, Charles J.....	Fayetteville, Washington county.....	B. S. A.
Lewis, Charles W.....	Collegeville, Saline county.....	M. E.
Lipsey, Dan B.....	Fayetteville, Washington county.....	C. E.
Martin, James R.....	Warren, Bradley county.....	B. S. A.
Mathews, Zella.....	Fayetteville, Washington county.....	B. S.
McCarty, Myrta.....	Fayetteville, Washington county.....	B. S.
McDearmon, B. C.....	Batesville, Independence county.....	M. E.
McGavock, Randall.....	Fayetteville, Washington county.....	B. S.
McGehee, Madison.....	Pine Bluff, Jefferson county.....	B. S. A.
McIlroy, Charles.....	Fayetteville, Washington county.....	C. E.
McKelvey, William F.....	Gainesville, Green county.....	B. S.
McKennon, George C.....	Clarksville, Johnson county.....	M. E.
McNeeley, Susie.....	Ashevil'e, Pulaski county.....	B. S.
Medearis, George Y.....	Walnut Ridge, Lawrence county.....	B. A.
Medearis, R. S.....	Cincinnati, Washington county.....	B. A.
Mills, Nannie.....	Clarendon, Monroe county.....	B. S.
Mooney, Mary K.....	Fayetteville, Washington county.....	B. S.
Mooney, Robert H.....	Fayetteville, Washington county.....	B. A.
Morley, May.....	Fayetteville, Washington county.....	B. S.
Morley, Sam L.....	Central, Sebastian county.....	C. E.
Moulden, J. P.....	Plano, Texas.....	B. S. A.
Mullins, Charles T.....	Fayetteville, Washington county.....	B. S. A.
Mullins, Lucy.....	Fayetteville, Washington county.....	L. I.
Mullins, Ola.....	Fayetteville, Washington county.....	B. S.
Mullins, William E.....	Fayetteville, Washington county.....	C. E.
Neal, William J.....	Van Buren, Crawford county.....	L. I.
Neel, Joseph O.....	Princeton, Dallas county.....	B. A.
Nisbett, J. Samuel.....	Dobyville, Clark county.....	B. A.

NAME.	RESIDENCE.	COURSE.
Oliver, Florence.....	Lee's Creek, Crawford.....	B. A.
Osborne, Wayne L.....	Rogers, Benton county.....	B. A.
Owens, Phoebe.....	Fayetteville, Washington county.....	B. S.
Parker, James E.....	Aurora, Madison county.....	B. A.
Phillips, James M.....	La Tour, Phillips county.....	C. E.
Pittman, Robert F.....	Fayetteville, Washington county.....	B. A.
Powell, Henry B.....	Smeadley, Johnson county.....	C. E.
Pugh, Frank.....	Hamburg, Ashley county.....	B. S. A.
Purdy, Jake C.....	Lake Providence, La.....	M. E.
Purdy, Samuel M.....	Lake Providence, La.....	C. E.
Ratcliffe, William P.....	Little Rock, Pulaski county.....	B. A.
Rattenbury, Edith.....	Fayetteville, Washington county.....	B. S.
Rattenbury, Blanche.....	Fayetteville, Washington county.....	B. S.
Riley, Martin.....	Fayetteville, Washington county.....	B. S. A.
Robinson, Joe T.....	Lonoke, Lonoke county.....	B. S.
Rosser, Alta.....	Evansville, Washington county.....	L. I.
Ruggles, Stewart D.....	Fayetteville, Washington county.....	C. E.
Russell, David B.....	Morrilton, Conway county.....	B. S.
Rutherford, Henry.....	Fort Smith, Sebastian county.....	B. A.
Scarborough, Guy.....	Little Rock, Pulaski county.....	C. E.
Sexton, Robert.....	Fayetteville, Washington county.....	M. E.
Simmons, Ella.....	Fayetteville, Washington county.....	B. S.
Slagle, Gay.....	Hico, Benton county.....	C. E.
Smith, Jas. H.....	Powhatan, Lawrence county.....	B. S. A.
Smith, M. Thomas.....	Pine Bluff, Jefferson county.....	B. S. A.
Speer, George H.....	Cedar Glades, Montgomery county.....	B. A.
Spencer, William M.....	Charleston, Franklin county.....	C. E.
Steel, Thomas A.....	Bradford, White county.....	L. I.
Sternberg, Henry.....	Ft. Smith, Sebastian county.....	C. E.
Steward, Lida.....	Alma, Crawford county.....	B. S.
Sutcliffe, William.....	Das Arc, Prairie county.....	B. S. A.
Taff, Sam M.....	Fayetteville, Washington county.....	C. E.
Templeton, Wade A.....	O'Kean, Randolph county.....	B. S.
Thomas, Alice.....	Fayetteville, Washington county.....	B. S.
Thomas, C. Kent.....	Fayetteville, Washington county.....	B. S. A.
Toomer, Robert E.....	Dardanella, Yell county.....	C. E.
Treadwell, S. Clem.....	Toledo, Cleveland county.....	L. I.
Trott, Ed. W.....	Fayetteville, Washington county.....	B. S. A.
Varner, T. Truitt.....	Greenwood, Sebastian county.....	B. S.
Vaulx, Madge.....	Fayetteville, Washington county.....	B. A.



NAME.	RESIDENCE.	COURSE.
Wade, Lena.....	Fayetteville, Washington county.....	L. I.
Wainwright, Lula.....	Fayetteville, Washington county.....	B. S.
Williams, Matie.....	Fayetteville, Washington county.....	L. I.
Wilson, Nell.....	Fayetteville, Washington county.....	B. S.
Wishard, Ernest.....	Dardanelle, Yell county.....	B. S. A.
Witt, R. Earle.....	Conway, Faulkner county.....	B. S.
Wright, Archie B.....	Fayetteville, Washington county.....	B. S. A.
Total.....		166

## A CLASS.

NAME.	RESIDENCE.	COURSE.
Baker, Bryant M.....	Fountain Hill, Ashley county.....	B. S. A.
Baker, Elbert M.....	Witcherville, Sebastian county.....	C. E.
Barnett, Carl P.....	Fayetteville, Washington county.....	C. E.
Barr, Frank.....	Fayetteville, Washington county.....	B. S. A.
Baylor, Della.....	Fayetteville, Washington county.....	B. A.
Beatty, Mary B.....	Fayetteville, Washington county.....	B. A.
Beleu, William R.....	Chismville, Logan county.....	C. E.
Benbrook, Agnes M.....	Fayetteville, Washington county.....	B. S.
Bishop, Annie.....	Fayetteville, Washington county.....	B. S.
Bishop, Sam A.....	Marianna, Lee county.....	B. A.
Bray, Thomas W.....	Fayetteville, Washington county.....	C. E.
Bridges, Jos. F.....	Greenwood, Sebastian county.....	B. S.
Brookfield, Vida.....	Wynne, Cross county.....	B. A.
Bradie, George.....	Redfield, Jefferson county.....	M. E.
Brown, Earle M.....	Fayetteville, Washington county.....	B. S. A.
Brown, Harold.....	Fayetteville, Washington county.....	B. S.
Bryan, Addis.....	Van Buren, Crawford county.....	C. E.
Buckner, George W.....	Fayetteville, Washington county.....	C. E.
Buckner, Walker.....	Fayetteville, Washington county.....	C. E.
Butts, John.....	Prairie View, Logan county.....	L. I.
Carter, Lizzie M.....	Fayetteville, Washington county.....	B. S.
Casteel, William T.....	Hayne, Lee county.....	B. S.
Cawood, V. Henry.....	Osage Mills, Benton county.....	B. S.
Chapman, William C.....	Cincinnati, Washington county.....	B. S. A.
Childers, Charles.....	Imboden, Lawrence county.....	B. S. A.
Chittenden, Susie.....	Fayetteville, Washington county.....	B. A.
Church, John W.....	Galena, Howard county.....	B. S.
Coker, George W.....	Plantersville, Drew county.....	B. S. A.
Cole, Charles E.....	Fayetteville, Washington county.....	M. E.
Cole, Lillie.....	Fayetteville, Washington county.....	B. S.

NAME.	RESIDENCE.	COURSE.
Cole, Mattie I.....	Boonsboro, Washington county.....	B. S.
Core, Isaac.....	Booneville, Logan county.....	B. S. A.
Cornelius, Ben.....	Van Buren, Crawford county.....	O. E.
Cornelius, Rose.....	Van Buren, Crawford county.....	B. S.
Cotner, Joseph S.....	Chismville, Logan county.....	C. E.
Counterman, R. M.....	Dayton, Sebastian county.....	B. S. A.
Cox Robert S.....	Gassville, Baxter county.....	B. A.
Craig, Carl G.....	Baxter Springs, Kansas.....	B. S.
Crawford, Maude.....	Springfield, Missouri.....	B. S.
Crenshaw, Bradley.....	Dermott, Chicot county.....	B. S. A.
Davies, Lila.....	Fayetteville, Washington county.....	B. S.
Davis, John M.....	Lamar, Johnson county.....	B. A.
Davis, Thomas L.....	Greenway, Clay county.....	B. S. A.
Dickson, N. J.....	Bloomfield, Benton county.....	B. S.
Dowell, Frank.....	Fayetteville, Washington county.....	B. S. A.
Drain, Robert.....	Huntsville, Madison county.....	C. E.
Droke, Lafayette.....	Rogers, Benton county.....	B. A.
Dunbar, William T.....	Dardanelle, Yell county.....	B. S.
Duncan, Cameron.....	Fayetteville, Washington county.....	B. A.
Dunlap, Maude.....	Winslow, Washington county.....	L. I.
Edmiston, Charles.....	Prairie Grove, Washington county.....	B. S.
Edmonds, David.....	Fayetteville, Washington county.....	C. E.
Emerson, J. J.....	West Fork, Washington county.....	C. E.
Evins, Frank P.....	Fayetteville, Washington county.....	C. E.
Evins, Hugh C.....	Fayetteville, Washington county.....	M. E.
Fishback, Herbert.....	Fort Smith, Sebastian county.....	B. A.
Fleming, Archie.....	Fayetteville, Washington county.....	B. S. A.
Foster, John E.....	Fort Smith, Sebastian county.....	B. A.
Freyschlag, Sallie.....	Fayetteville, Washington county.....	B. S.
Fuller, Thomas M.....	Waldron, Scott county.....	B. S.
Gee, Joseph F.....	Conyers, Georgia.....	B. S.
Gibson, Herbert D.....	Wesley, Madison county.....	M. E.
Glenny, Ernest T.....	Eureka Springs, Carroll county.....	B. S.
Gladden, A. L.....	Rover, Yell county.....	B. S.
Godfrey, Joe H.....	Pine Bluff, Jefferson county.....	B. A.
Golder, George O.....	Mammoth Springs, Fulton county.....	M. E.
Goodier, John O.....	Dardanelle, Yell county.....	C. E.
Green, John D.....	Clarendon, Monroe county.....	C. E.
Griffin, Kate.....	Fayetteville, Washington county.....	B. S.
Grother, Mary.....	Fayetteville, Washington county.....	B. S.
Guilliams, William E.....	Farmington, Washington county.....	B. S. A.

NAME.	RESIDENCE.	COURSE.
Guise, Ernest M.....	Hamburg, Ashley county.....	B. S. A.
Gunter, Gertie.....	Fayetteville, Washington county.....	B. A.
Guthrie, Hugh L.....	Powhatan, Lawrence county.....	B. S. A.
Hackett, John T.....	Hackett City, Sebastian county.....	B. S.
Haley, Walter M.....	Hamburg, Ashley county.....	B. S. A.
Halley, Hunter.....	Halley, Desha county.....	C. E.
Hamm, Robert L.....	Monticello, Drew county.....	C. E.
Hardin, Luke J.....	Ten Miles Stand, Tenn.....	C. E.
Harrod, George.....	Holland, Faulkner county.....	B. A.
Haws, John P.....	Fayetteville, Washington county.....	L. I.
Henderson, Arthur.....	Osage Mills, Benton county.....	B. S.
Heusley, Elias T.....	Ozark, Franklin county.....	L. I.
Herring, S. R.....	Warren, Bradley county.....	B. S.
Hicks, Maxey.....	Mt. Ida, Montgomery county.....	C. E.
Hight, Beulah.....	Whitener, Madison county.....	L. I.
Hilderbrand, Homer.....	Crawfordsville, Crittenden county.....	C. E.
Hoge, Horace M.....	Fayetteville, Washington county.....	B. S. A.
Howerton, Daisy.....	Fayetteville, Washington county.....	B. S.
Hudgins, Jake.....	Pine Bluff, Jefferson county.....	C. E.
Hudson, Libbie.....	Fayetteville, Washington county.....	B. A.
Hudspeth, John L.....	Hamburg, Ashley county.....	B. A.
Hughes, William E.....	O'Kean, Randolph county.....	B. S.
Izard, John S.....	Forrest City, St. Francis county.....	B. A.
Jacks, Bettie.....	Fayetteville, Washington county.....	B. S.
Jacks, Dan.....	Heleza, Phillips county.....	B. S.
Jacobs, Cyrus.....	Fort Smith, Sebastian county.....	B. A.
Jacobson, Adolph.....	Little Rock, Pulaski county.....	M. E.
James, Thomas.....	Fayetteville, Washington county.....	B. S. A.
Jenkins, John T.....	Fayetteville, Washington county.....	M. E.
Jennings, Orville.....	Little Rock, Pulaski county.....	B. A.
Johnson, Boyd B.....	Des Arc, Prairie county.....	B. S. A.
Kirk, Albert S.....	Cassville, Mo.....	C. E.
Kiser, Maggie.....	Bentonville, Benton county.....	B. S.
Knight, Datto.....	Huntsville, Madison county.....	B. S.
Lane, Mattie C.....	Dallas, Polk county.....	B. S.
Lang, William H.....	Fayetteville, Washington county.....	B. S.
Lasater, Newton A.....	Mulberry, Franklin county.....	L. I.
Lee, Carrie A.....	Fayetteville, Washington county.....	L. I.
Leigh, Argyle J.....	Ola, Yell county.....	C. E.
Lewis, John R.....	Boonsboro, Washington county.....	B. S. A.
Lewis, Nettie.....	Farmington, Washington county.....	B. S.

NAME.	RESIDENCE.	COURSE.
Lofland, Seth W. ....	Bluffton, Yell county.....	B. S. A.
Long, Ernest A. ....	Forrest City, St. Francis county.....	B. S. A.
Loughborough, J. Fairfax.....	Little Rock, Pulaski county.....	C. E.
Lowry, Clyde.....	Huntsville, Madison county.....	B. S.
Mallory, Joseph V.....	Newport, Jackson county.....	B. S.
Manning, Jennie.....	Fayetteville, Washington county.....	B. S.
Marion, Willie .....	Fayetteville, Washington county.....	B. S.
Martin, T. Perry.....	Lowell, Benton county.....	B. A.
Matheny, Ivan.....	Dallas, Polk county.....	B. S.
May, Pearl.....	Forrest City, St. Francis county.....	B. S.
McBride, Richard J.....	Portland, Ashley county.....	B. A.
McCarroll, Sidney.....	Danville, Yell county.....	B. S. A.
McCrimmon, Alice.....	Fayetteville, Washington county.....	B. S.
McCord, Charles F.....	Goshen, Washington county.....	B. A.
McFarlane, Augusta.....	Pine Bluff, Jefferson county.....	B. A.
McLeod, J. Simon.....	Lowell, Benton county.....	B. A.
McLoughlin, Roe.....	Odessa, Mo.....	B. S.
McMillan, Charles S.....	Pine Bluff, Jefferson county.....	M. E.
McNair, Maude.....	Fayetteville, Washington county.....	B. S.
McNair, May.....	Fayetteville, Washington county.....	B. S.
Meister, Charles.....	Coal Hill, Johnson county.....	M. E.
Millsap, William J.....	Fayetteville, Washington county.....	M. E.
Montgomery, L. Percy.....	Jacksonville, Pulaski county.....	B. S.
Moore, Ada .....	Cincinnati, Washington county.....	B. S.
Moore, Jesse F.....	Fayetteville, Washington county.....	M. E.
Moore, Martha.....	Cincinnati, Washington county.....	B. S.
Moore, Nolen.....	Fayetteville, Washington county.....	B. S. A.
Mooring, Lula.....	Fayetteville, Washington county.....	B. S.
Mullius, John S.....	Fayetteville, Washington county.....	M. E.
Murfee, Howard.....	Fayetteville, Washington county.....	B. S.
Murfee, Manning .....	Fayetteville, Washington county.....	C. E.
Myers, Cora.....	Fayetteville, Washington county.....	B. S.
Myers, John F.....	Fayetteville, Washington county.....	C. E.
Naill, G. Walker.....	Surrounded Hill, Prairie county.....	B. S.
Neal, William E.....	Cedarville, Crawford county.....	B. S.
Nixon, William A.....	Mulberry, Franklin county.....	C. E.
Norfleet, Mary.....	Alma, Crawford county.....	B. S.
Palmer, George D .....	Marvel, Phillips county.....	B. S.
Parton, William B.....	Cedarville, Crawford county.....	C. E.
Patton, John W.....	Dardanelle, Yell county.....	M. E.



NAME	RESIDENCE	COURSE
Pettigrew, John .....	Charleston, Franklin county .....	C. E.
Pettigrew, Nellie.....	Fayetteville, Washington county.....	B. S.
Pettus, Ernest G.....	Des Arc, Prairie county.....	B. S. A.
Phillips, Robert H.....	Powhatan, Lawrence county.....	B. S. A.
Purdy, May.....	Fayetteville, Washington county.....	B. S.
Putman, Leigh.....	Fayetteville, Washington county.....	B. S. A.
Rainwater, Carrie.....	Fayetteville, Washington county.....	B. S.
Rawlings, Charles F.....	Waldron, Scott county.....	B. S.
Regan, Albert F.....	Springfield, Mo.....	M. E.
Riley, Cora.....	Fayetteville, Washington county.....	B. S.
Roark, Lizzie.....	Fayetteville, Washington county.....	B. S.
Rutledge, Lena.....	Fayetteville, Washington county.....	B. S.
Sadler, Daisy B.....	Cass, Franklin county.....	B. S.
Sadler, H. E.....	Cass, Franklin county.....	C. E.
Scobey, Henry E.....	Warren, Bradley county.....	B. S.
Scott, James W.....	Kerr Station, Lonoke county.....	M. E.
Scott, John E.....	Kerr Station, Lonoke county.....	M. E.
Scott, Mamie.....	Fayetteville, Washington county.....	B. S.
Scott, Willard B.....	Fayetteville, Washington county.....	B. S.
Self, Ruth.....	Little Rock, Pulaski county.....	B. S.
Self, Thomas.....	Little Rock, Pulaski county.....	C. E.
Sellers, Oscar.....	Center Point, Howard county.....	C. E.
Shinn, John R.....	Lockesburg, Sevier county.....	B. S.
Shipley, John.....	St. Paul, Madison county.....	B. A.
Shultz, William M.....	White Oak, Cleveland county.....	B. S.
Simms, Servius T.....	Shaver, Boone county.....	B. S. A.
Simonds, Alice.....	Fayetteville, Washington county.....	B. S.
Skelton, James L.....	Fayetteville, Washington county.....	C. E.
Smith, Gertie.....	Fayetteville, Washington county.....	B. S.
Spears, Thomas R.....	Clarksville, Johnson county.....	B. S. A.
Steere, Ed. P.....	Fayetteville, Washington county.....	C. E.
Stone, William.....	Mammoth Springs, Fulton county.....	M. E.
Stubblefield, Ed. A.....	Exeter, Mo.....	B. S. A.
Switzer, Fred H.....	Petersburg, Ashley county.....	M. E.
Taylor, Mattie.....	Fayetteville, Washington county.....	B. S.
Treadwell, Madison F.....	Pine Bluff, Jefferson county.....	B. S.
Tunstill, William M.....	Goshen, Washington county.....	B. S.
Turner, Charles A.....	Greenway, Sebastian county.....	B. S.
Valentine, J. B.....	Webb City, Franklin county.....	B. S. A.
Varner, Eva.....	Springdale, Washington county.....	L. I.

NAME	RESIDENCE	COURSE.
Vaughan, Mollie.....	Fayetteville, Wash'ngton county.....	B. S.
Vaulx, Kate.....	Fayetteville, Washington county.....	B. S.
Volner, Charles.....	Fayetteville, Washington county.....	C. E.
Wade, Lila.....	Fayetteville, Washington county.....	B. S.
Wainwright, Joe.....	Fayetteville, Washington county.....	B. S.
Ward, W. C.....	Mulberry, Franklin county.....	B. S.
Washington, John D.....	Cincinnati, Washington county.....	B. S. A.
Washington, Ruby.....	Cincinnati, Washington county.....	B. S.
Watson, Rufus H.....	Jersey, Bradley county.....	B. S. A.
Watson, Theo. L.....	Warren, Bradley county.....	C. E.
White, Fannie.....	Dutch Mill's, Washington county.....	L. I.
Williams, James I.....	Lawrenceburg, Kansas.....	B. A.
Williams, Jennie.....	Fayetteville, Washington county.....	B. A.
Williams, William M.....	Fayetteville, Washington county.....	B. S.
Williams, William P.....	Lowell, Benton county.....	C. E.
Wilson, Sumner R.....	Prairie Grove, Washington county.....	C. E.
Wilson, Wayne T.....	Fayetteville, Washington county.....	M. E.
Wisdom, Charles R.....	Wyandotte, Hot Spring county.....	M. E.
Wood, Walker.....	Fayetteville, Washington county.....	C. E.
Woodmansee, Clarence.....	Fayetteville, Washington county.....	B. S. A.
Woodward, G. W.....	Sub Rosa, Franklin county.....	B. S. A.
Wooten, Daisy.....	Clarksville, Texas.....	B. S.
Wright, R. R.....	Burnville, Sebastian county.....	B. S. A.
Wylds, Charles A.....	Forrest City, St. Francis county.....	B. S.
Total.....		216

## B CLASS.

NAME.	TOWN.	COUNTY.
Anderson, Edmond C.....	Star City.....	Lincoln.
Arnett, Napoleon.....	Fayetteville.....	Washington.
Askew, Ed. E.....	El Dorado.....	Union.
Barrick, S. E.....	Campbell, Indian Territory.....	
Baum, Gertrude.....	Fayetteville.....	Washington.
Beattie, Godwin.....	Fayetteville.....	Washington.
Belser, Louie M.....	Monticello.....	Drew.
Benson, Fred L.....	Washington.....	Hempstead.
Boothe, Nathan A.....	Boothe.....	Scott.
Bowling, Joe.....	Alma.....	Crawford.
Cabel, Jennie J.....	Fort Smith.....	Sebastian.
Campbell, George M.....	Van Buren.....	Crawford.
Chandler, Lula.....	Evansville.....	Washington.

NAME	TOWN.	COUNTY.
Cline, John E.....	Dardanelle.....	Yell.
Cole, Otho H.....	Boonsboro.....	Washington.
Cornelius, Gus.....	Van Buren.....	Crawford.
Cunliffe, John.....	Fayetteville.....	Washington.
Cunningham, George.....	Hot Springs.....	Garland.
Custer, Rufus H.....	Fayetteville.....	Washington.
Drees, Clem.....	Little Rock.....	Pulaski.
Fleming, Pearl.....	Reyno.....	Randolph.
Fletcher, Tucker.....	Pine Bluff.....	Jefferson.
Grother, Henry.....	Fayetteville.....	Washington.
Guilliams, Jesse M.....	Farmington.....	Washington.
Guilliams, Robert F.....	Farmington.....	Washington.
Hall, Gurtha.....	Lufra.....	Ouachita.
Halley, Dixie.....	Fayetteville.....	Washington.
Hayden, Charles.....	Chouteau, Ind. Ter.....	.....
Hester, Louis P.....	Fayetteville.....	Washington.
Hickman, L. Q.....	Pocolo, Ind. Ter.....	.....
Howard, Helen.....	Fayetteville.....	Washington.
Hudgins, Oscar P.....	St. Francis.....	Clay.
Hukill, Oscar.....	Hot Springs.....	Garland.
Hunt, Sam L.....	Fayetteville.....	Washington.
Jones, Duff E.....	Cove.....	Polk.
Jones, Lorine R.....	Fayetteville.....	Washington.
Kenner, Rufus B.....	Osage.....	Carroll.
Kitching, Stanley.....	Locust Cottage.....	Jefferson.
Koauff, Guy W.....	Des Arc.....	Prairie.
Kerstan, Ferdinand.....	Beirne.....	Clark.
Lane, Thomas.....	McCrory.....	Woodruff.
Lee, Robert R.....	Walnut Hills.....	Lafayette.
Leverett, Rose.....	Fayetteville.....	Washington.
Lewis, Lena.....	Fayetteville.....	Washington.
Lewis, Linn.....	Fayetteville.....	Washington.
Lindsey, K. Wright.....	Little Rock.....	Pulaski.
Lipsey, Alva.....	Fayetteville.....	Washington.
Massie, Frank.....	Huntsville.....	Madison.
Mayes, Joseph F.....	Briar Creek, Ind. Ter.....	.....
Mayes, William A.....	Farmington.....	Washington.
Mayes, William L.....	Briar Creek, Ind. Ter.....	.....
McBride, Idella.....	Hackett City.....	Sebastian.
McCormick, Charles D.....	Fayetteville.....	Washington.
McGehee, Robert.....	Pine Bluff.....	Jefferson.

NAME.	TOWN.	COUNTY.
McNeeley, William A.....	Asheville.....	Pulaski.
Miller, Walter.....	Wyandotte.....	Hot Spring.
Monroe, Claude.....	Augusta.....	Woodruff.
Morgan, George L.....	Van Buren.....	Crawford.
Moss, Charles E.....	Haynes.....	Lee.
Murfee, Hunter.....	Fayetteville.....	Washington.
Murray, Gussie.....	Fayetteville.....	Washington.
Myers, Belva.....	Fayetteville.....	Washington.
Newman, Charles E.....	Cotton Plant.....	Woodruff.
Nichols, Robert.....	Atoka, Ind. Ter.....	
Piton, Fred.....	Little Rock.....	Pulaski.
Provine, George A.....	Honey Grove, Texas.....	
Sadler, Jasmine.....	Ozark.....	Franklin.
Sanders, Ed. J.....	Pine Bluff.....	Jefferson.
Scott, Sam B.....	La Belle.....	Saline.
Scott, William M.....	Kerr Station.....	Lonoke.
Scofield, William C.....	Weldon.....	Jackson.
Scroggins, James C.....	Morrilton.....	Conway.
Shores, Henry.....	White Rock.....	Franklin.
Stone, May.....	Fayetteville.....	Washington.
Surratt, Willis.....	Ft. Smith.....	Sebastian.
Taylor, Jesse N.....	Colt.....	St. Francis.
Thornton, Ward C.....	Pactolus.....	Benton.
Van Horn, Nellie.....	Corsicano, Texas.....	
Whitten, George W.....	Fayetteville.....	Washington.
Williams, Hattie.....	Fayetteville.....	Washington.
Wilson, W. Lee.....	Pontotoc, Miss.....	
Wright, Moses.....	Washington.....	Hempstead.
York, James M.....	West Fork.....	Washington.
Total.....		83

### IRREGULAR.

NAME.	TOWN.	COUNTY.
Dowell, William M.....	Harrison.....	Boone.
Dupuy, J. L.....	Marianna.....	Lee.
Heberly, Joseph A.....	Fayetteville.....	Washington.
Valentine, John T.....	Webb City.....	Franklin.
Total.....		4



## NOT CLASSIFIED.

NAME.	TOWN.	COUNTY.
Collins, Thomas J.....	Little Rock.....	Pulaski.
Culpepper, M. Leslie.....	Pine Bluff.....	Jefferson.
Daneyant, Reid.....	Elmot.....	Mississippi.
Finney, John E.....	Huntington.....	Sebastian.
Freeye, Allen.....	Huntington.....	Sebastian.
Glitch, Carl.....	Eureka Springs.....	Carroll.
Henderson, May.....	Fayetteville.....	Washington.
Jones, Bettie C.....	Cove.....	Polk.
Kingsland, Bush.....	Douglas Landing.....	Lincoln.
Kiser, Grace.....	Bentonville.....	Benton.
Purifoy, Marshall W.....	Zama.....	Nevada.
Ross, Kelley.....	Prairie Grove.....	Washington.
Sadler, Frederick Q.....	Cass.....	Franklin.
Swartz, George A.....	Poplar Grove.....	Phillips.
Taylor, Thomas G.....	Fayetteville.....	Washington.
Total.....		15

## LAW STUDENTS.

NAME.	STATE.
Ashley, Moran.....	Arkansas.
Duncan, Robert W.....	Arkansas.
Duty, M. K.....	West Virginia
Goodwin, Walter P.....	Arkansas.
Morrison, Marshall.....	Arkansas.
Neal, James.....	Arkansas.
Pollard, Stirman.....	Arkansas.
Total.....	7

## MUSIC.

Number of Pupils.....	26.
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## ELOCUTION.

Number of Pupils.....	47
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## ART.

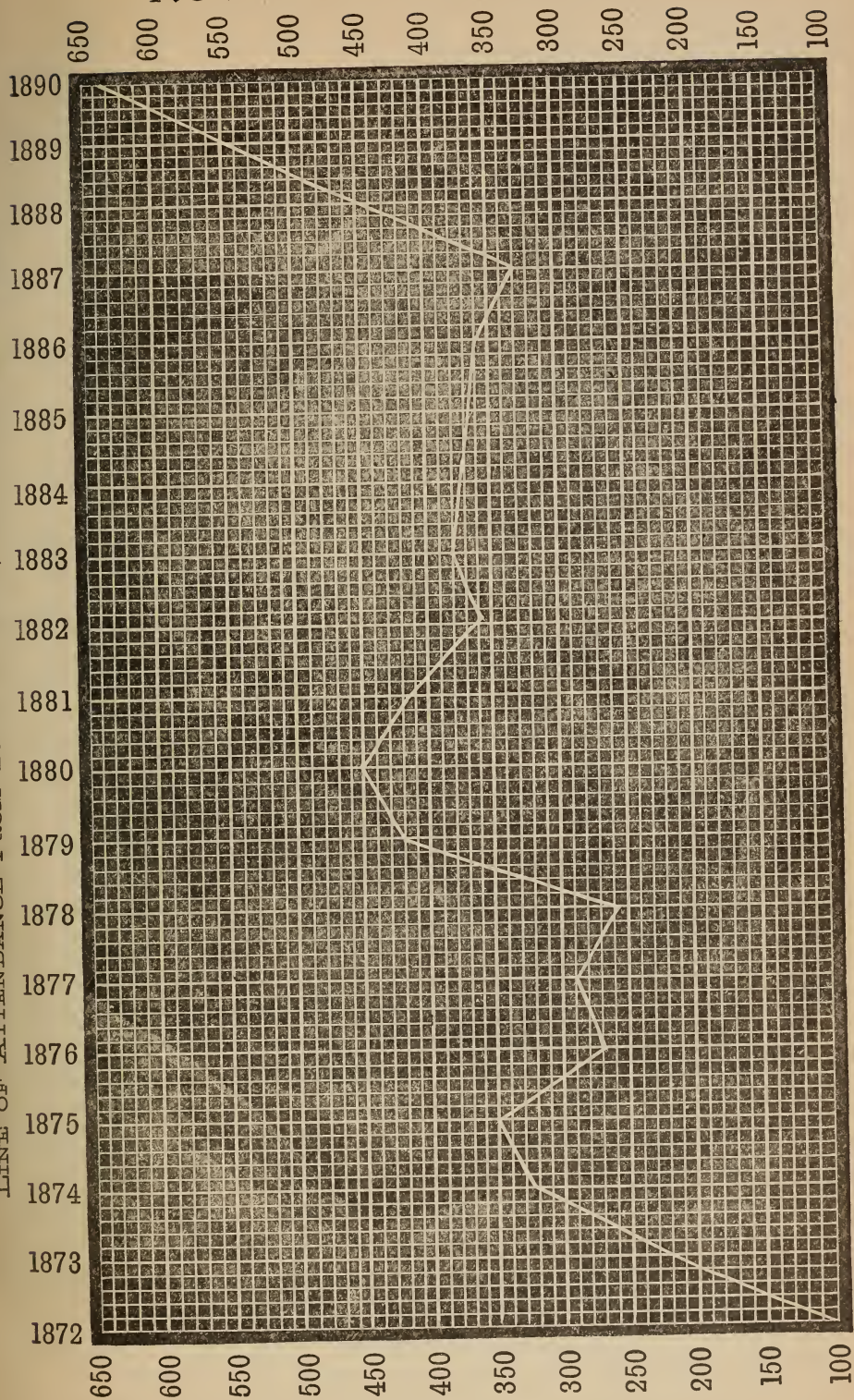
Number of Pupils.....	19
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## SUMMARY BY COURSES.

Doctor of Philosophy.....	6
Bachelor of Arts.....	89
Bachelor of Science .....	162
Civil Engineering.....	96
Mechanical Engineering.....	32
Bachelor of Scientific Agriculture.....	66
Licentiate of Ins'truction.....	34
Irregular.....	11
"B" Students (courses not assigned).....	83
Not Classified.. ...	15
Irregular (in course and class).....	4
Law Students.....	7
Music Pupils.....	26
Elocution Pupils.....	47
Art Pupils.....	19
<hr/>	
Total.....	695
Names repeated (in Music, Art and Elocution).....	64
<hr/>	
Total (at Fayetteville).....	631
Students in Medical Department (Little Rock).....	76
Students in Branch Normal (Pine Bluff).....	190
<hr/>	
Grand Total.....	897

# NUMBER OF STUDENTS.

LINE OF ATTENDANCE FROM 1872 TO 1890, INCLUSIVE, 19 YEARS.







## ORIGIN AND DESIGN OF THE UNIVERSITY.

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The aims of the University are set forth in the following sections of the acts of Congress and of the General Assembly of Arkansas, under which it was established :

The act of Congress of 1862 (U. S. Statutes, Vol. 61, Stat. 7, sec. 4) appropriating lands to establish colleges in the States, provides that all moneys derived from their sale "shall be inviolably appropriated by each State which may take and claim the benefit of this act, to the endowment, support and maintenance of at least one college, where the leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to Agriculture and the Mechanic Arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

In addition to the above the Morrill Bill, recently enacted, gives to all agricultural colleges the sum of fifteen thousand dollars per annum, increasing annually by the sum of one thousand dollars until a maximum of twenty-five thousand dollars is reached. This money arises from the sale of public lands. It can be used only for instruction in and the purchase of apparatus for the following subjects: Agriculture, Mechanic Arts, the English Language, and the various branches of Mathematical, Physical, Natural and Eco-



nomie Science, with special reference to their application in the industries of life.

Our own General Assembly (act of July 23, 1868), in accepting the original grant and in creating the University, provides that the fund realized therefrom, "shall be forever devoted and applied to the endowment and maintenance, under such laws or articles of incorporation as may be by the General Assembly hereafter provided, of an institution of learning to be styled 'The Arkansas Industrial University,' wherein shall be taught, in addition to the usual course of study prescribed in universities, the science and practice of Agriculture, the Mechanical Arts, Engineering and Military Science and Tactics."

In order further to emphasize the Agricultural and Mechanical Departments, the General Assembly, in an act approved March 30, 1887, made handsome appropriations to put these leading departments on a broad and firm foundation, and ordained that all male *beneficiaries* should pursue one of these courses; restricted the subjects to be taught to beneficiaries; and fixed the number and character of the professorships. The evident design of the Legislature was to respond to the demands and needs of the State, by creating an Agricultural and Mechanical Institution, with such subsidiary courses as the amount of the appropriation would allow. The present Board of Trustees and the Faculty of the institution, aware of the necessities of the State and fully in accord with the policy outlined by the Legislature, have done all in their power, in laying out the appropriation and drawing up the Courses of Study, to meet the wants, both of the great mass of the State, and also of the minority, in a subsidiary way. We are fully persuaded that the Agricultural and Mechanical courses here offered, and the facilities afforded by the legislative appropriations, will enable graduates to compare favorably with those of similar schools, while at the same time, with little or no additional cost to the State, strong Classical and Normal courses are given.

## COURSES OF INSTRUCTION.

The courses offered are the following :

1. Agricultural, leading to the degree of B. S. A.	See Schedule p. 37 Detailed statement p. 53					
2. Short Agricultural, ending with Sophomore year.....	"	"	"	38	"	" 61
3. Mechanical Engineering, leading to Degree of B. M. E .....	"	"	"	39	"	" 68
4. Manual Training, ending with the Sophomore year.....	"	"	"	40	"	" 64
5. Civil Engineering, leading to the Degree of B. C. E.....	"	"	"	41	"	" 70
6. Scientific, leading to the Degree of B. S.....	"	"	"	42	"	" 32
7. Classical course, leading to the Degree of B. A.	"	"	"	43	"	" 32
8. Normal course, leading to the Certificate of L. I.....	"	"	"	44	"	" 85
9. Law course, leading to the Degree of LL. B.....	See Detailed Statement, page 114.					

Courses 1, 2, 3, 4, 5 and 6 are free to all beneficiaries, but if any language other than English is taken, the regular tuition fee is charged.

Courses 7 and 8 can be taken only by the payment of the regular tuition fee of ten dollars per year.

Course 9 by special fees.

All courses *for male students* are required to include practical work at from three cents to ten cents per hour. The hours of the day are, therefore, divided into two parts; the morning hours are devoted to recitations and lectures in the various courses; three hours of the afternoon are devoted to the various kinds of practical work. The schedule of courses from p. 37 to 44 inclusive, includes only the five periods into which the hours from 9 a. m. to 12:20 p. m. are divided. For afternoon work all male students are referred to p. 45 and following, where the full schedule of afternoon work is given.

Arrangements have been made so that a student in any course *may*, by application to the Faculty, and at the discretion of that body, take, as a fifth study, French in the Freshman and Sophomore years, and German in the Junior and Senior years; and where possible, as stated in schedule (pp. 37 to 44 inclusive), the student has been allowed to use his own discretion in choosing the studies marked with a dagger; but in all cases, beneficiaries, when they take any language other than English, must pay the regular tuition fee of ten dollars per year.

## CASSICAL COURSE.

The Classical Course is intended to meet the wants of those who, while strong and steady enough to do the practical work required, have the energy and will-power to do the mental work of a B. A. course, and obtain that degree as a basis for professional life, or for mental training. We are glad to be able to offer a strong and carefully planned B. A. course.

## SCIENTIFIC COURSE.

The Scientific course is intended to offer thorough and extensive training in the principles of General Science and English, together with French and German as electives.

Especial attention is paid to the Physical and Biological Sciences.

An Elementary Course, including Chemistry, Botany, Zoology and Physiology is taken in the Sub-Freshman year. These subjects, with Physics, Astronomy, Mineralogy, Geology and Entomology, are taken up in the higher classes and more thoroughly studied; two years and one term of Laboratory work being allowed for the Biological sciences and Geology, and an equal amount of time for Chemistry and Physics.

It is believed that the advantages offered in Chemistry, Biology and allied sciences in this course, will be found scarcely inferior to those of similar courses in any of our higher institutions of learning. The well-equipped Chemical, Mineralogical and Biological laboratories of the University afford ample means of illustration, as well as excellent opportunities for practical scientific work, and for original investigations.

Those who satisfactorily complete the course in General Science are entitled to the degree of B. S. (Bachelor of Science). The afternoon exercises in this course are confined to the Laboratory, Shop or Farm, Field Surveying and Drawing; but the student may substitute work on the farm for part of his shop work if he so desire. The course in General Science is open to all beneficiaries, but if they choose to take addi-

tional work in French or German they must pay the regular tuition fee of ten dollars per year.

### MANUAL TRAINING.

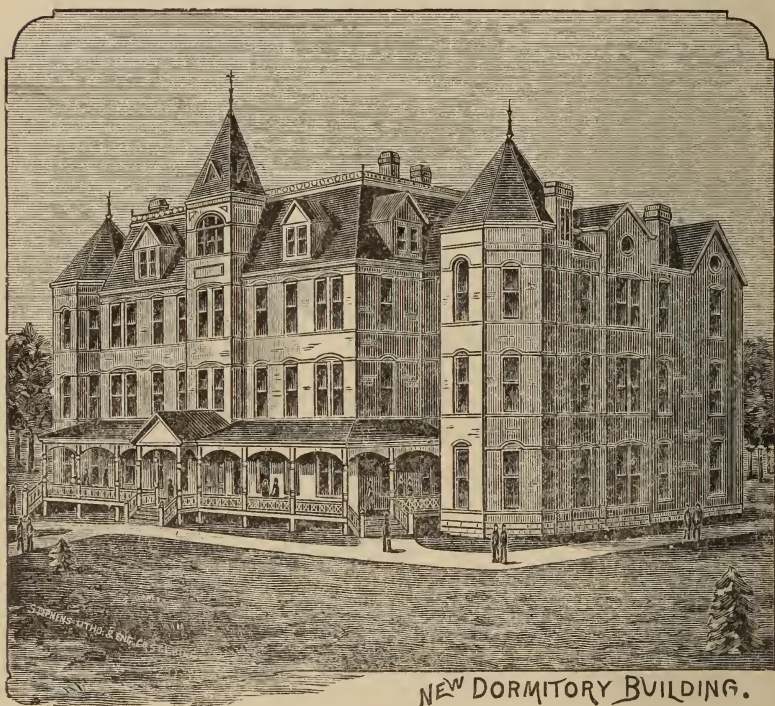
By a resolution of the Board of Trustees, every parent or guardian, is required to choose for his son or ward, if a minor, either the Mechanical or Agricultural course of labor, and to make a written communication to the President at the entrance of the student, stating the choice made.

### CONDITIONS FOR ADMISSION TO FRESHMAN CLASS.

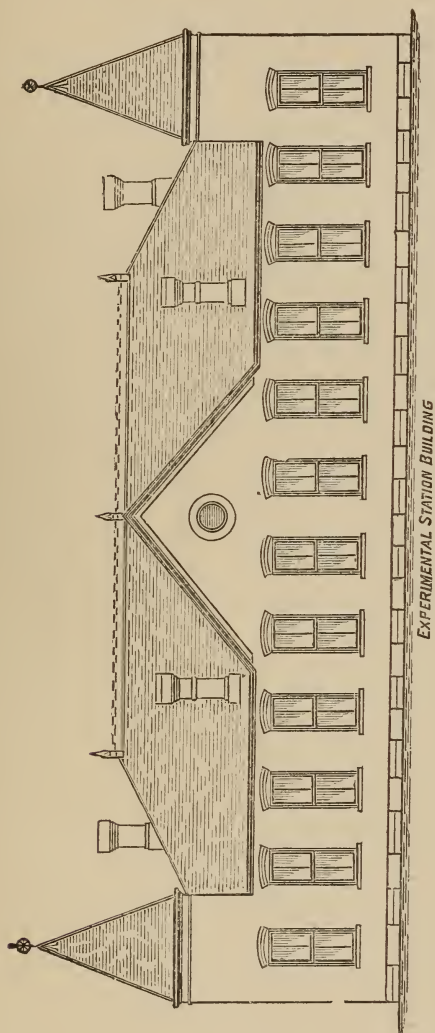
All new students seeking to enter the Freshman Class will be examined in Geography, U. S. History, English Grammar (Analysis and Composition), Arithmetic, Algebra (to Quadratic Equations), and Latin if the course of study embraces Latin.

Candidates for the higher classes, or for the Freshman Class, after beginning of session, will be examined also in subjects passed over by the class.











## COURSES OF STUDY 1891.

## I. -AGRICULTURAL COURSE FOR THE DEGREE OF BACHELOR OF SCIENTIFIC AGRICULTURE (B. S. A.).

CLASSES.	PERIOD.	FIRST TERM.	SECOND TERM.	THIRD TERM
A.	1	English Gram. and Comp.....	English Gram. and Comp.....	English Gram. and Comp..
	2	Arithmetic.....	Arithmetic.....	Arithmetic.
	3	Geography.....	United States History.....	United States History.
	4	Reading and Spelling .....	Reading and Spelling .....	Reading and Spelling.
SUB-FRESHMAN.	1	.....	Elementary Chemistry.....	.....
	2	Elementary Botany.....	.....	Elementary Physiology.
	3	Algebra .....	Algebra.....	Algebra.
	4	Physical Geography.....	Phys. Geog. and B'k-k'p'g....	Book-keeping.
	5	English Anal. and Comp.....	English Anal. and Comp.....	English Anal. and Comp.
FRESHMAN.	1	Algebra.....	Geometry .....	Geometry.
	2	Rhetoric.....	Rhetoric.....	Civil Government.
	3	French (elective.).....	French (elective.).....	French (elective.)
	4	Physics .....	Physics .....	Agriculture.
	5	Zoology .....	Zoology.....	Botany.
SOPHOMORE.	1	General History.....	General History.....	General History.
	2	Structural Botany.....	Entomology.....	Stock Feeding.
	3	General Chemistry.....	General Chemistry .....	General Chemistry..
	4	French (elective.).....	French (elective.).....	French (elective.)
	5	Trigonometry.....	.....	Veterinary Anatomy.
JUNIOR.	1	Mineralogy .....	Geology.....	Geology.
	2	German (elective.).....	German (elective.).....	Horticulture.
	3	Veterinary Anatomy.....	Veterinary Science.....	Veterinary Science.
	4	Analytical Chemistry.....	Analytical Chemistry .....	Analytical Chemistry.
	5	Agriculture .....	Agriculture.....	German (elective.)
SENIOR.	1	German (elective.).....	German (elective) .....	German (elective)
	2	Veterinary Science.....	Dairy Husbandry.....	Dairy Husbandry.
	3	Horticulture .....	Surveying.....	Agricultural Machinery.
	4	Stock Breeding.....	Stock Breeding.....	Stock Breeding.
	5	Analytical Chemistry.....	Agricultural Chemistry.....	Agricultural Chemi-try.

COURSES OF STUDY—*Continued.*

## II—SHORT AGRICULTURAL COURSE.

CLASSES.	PE 100.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A	1	English Gram. and Comp.....	English Gram. and Comp.....	English Gram. and Comp.
	2	Arithmetic.....	Arithmetic.....	Arithmetic.....
	3	Geography.....	United States History.....	United States History.
	4	Reading and Spelling.....	Reading and Spelling.....	Reading and Spelling.
SUB-FRESHMAN.	1	Elementary Botany.....	.....	.....
	2	.....	Elementary Chemistry .....	Elementary Physiology.
	3	Algebra.....	Algebra.....	Algebra.
	4	Physical Geography.....	Phys. Geog. and Book-keep'g	Book-keeping.
	5	English Anal. and Comp.....	English Anal. and Comp.....	English Anal. and Comp.
FRESHMAN.	1	Algebra.....	Geometry.....	Geometry.
	2	Rhetoric.....	Rhetoric.....	Civil Government.
	3	French (elective.).....	French (elective.) .....	French (elective.)
	4	Physics .....	Agriculture.....	Agriculture.
	5	Zoo'ogy.....	Zoology.....	Botany.
SOPHOMORE.	1	General History.....	General History.....	General History.
	2	Horticulture.....	Dairy Husbandry.....	Dairy Husbandry.
	3	General Chemistry.....	General Chemistry.....	General Chemistry.
	4	Stock Breeding.....	Stock Breeding.....	Stock Breeding.
	5	French (elective.).....	French (elective).....	French (elective.)

COURSES OF STUDY—*Continued.*III.—MECHANICAL ENGINEERING COURSE FOR DEGREE OF BACHELOR OF  
MECHANICAL ENGINEERING (B. M. E.).\*

CLASSES.	PERIOD.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	1	English Gram. and Comp .....	English Gram. and Comp.....	English Gram. and Comp.
	2	Arithmetic.....	Arithmetic.....	Arithmetic.
	3	Geography.....	United States History.....	United States History.
	4	Reading and Spelling .....	Reading and Spelling.....	Reading and Spelling.
SUB-FRESHMAN.	1	Elementary Botany.....	.....	.....
	2	.....	Elementary Zoology.. .....	Elementary Physiology.
	3	Algebra.....	Algebra.....	Algebra.
	4	Physical Geography.....	Phys. Geog. and B'k-k'p'g....	Book-keeping.
	5	English Anal. and Comp.....	English Anal. and Comp.....	English Anal. and Comp.
FRESHMAN.	1	Algebra .....	Geometry.....	Geometry.
	2	Rhetoric.....	Rhetoric .....	Civil Government.
	3	French (elective).. .....	French (elective).....	French (elective).
	4	Physics. ....	Physics. ....	Physics.
	5	Shop Work Appliances.....	Roads, Streets and Pavem'ts.	Descriptive Geometry.
SOPHOMORE.	1	General History.. .....	General History.....	General History.
	2	Heat.....	Surveying.....	Surveying.
	3	General Chemistry.....	General Chemistry.. .....	General Chemistry.
	4	French (elective).....	French (elective).....	French (elective).
	5	Trigonometry .....	Analytical Geometry.....	Analytical Geometry.
JUNIOR.	1	Elements of Mechanism.....	Machinery and Mill Work.....	Machinery and Mill Work.
	2	Calculus .....	Calculus .....	Machine Design.
	3	Steam Engineering.....	Steam Engineering .....	Elementary Mechanics.
	4	Analytical Chemistry.....	Analytical Chemistry .....	Analytical Chemistry.
	5	German (elective).....	German (elective).....	German (elective).....
SENIOR	1	Applied Mechanics .....	Applied Mechanics .....	{ †Methods of Testing Steam Machinery.
	2	Metallurgy.....	Masonry Construction.....	Sanitary Engineering.
	3	Thermodynamics .....	Boiler Design.....	Steam Engine Design.
	4	German (elective).....	German (elective) .....	German (elective).
	5	Hydraulic Engineering .....	Electrical Engineering.....	Valve Gear Design.

\* Drawing, Shop Work, Surveying and Laboratory Practice are included in the practical afternoon exercises. The Degree of M. E. will be given three years after graduation to those who by successful practice prove themselves worthy.

† This will be supplemented by lectures on Specifications and Laws of Contracts.



COURSES OF STUDY—*Continued.*

## IV.—MANUAL TRAINING COURSE. \*

CLASSES.	PERIOD.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	1	English Gram. and Comp.....	English Gram. and Comp.....	English Gram. and Comp.
	2	Arithmetic .....	Arithmetic.....	Arithmetic.
	3	Geography.....	United States History. ....	United States History.
	4	Reading and Spelling.....	Reading and Spelling .....	Reading and Spelling.
SUB-FRESHMAN.	1	Elementary Botany .....	.....	.....
	2	.....	Elementary Zoology.....	Elementary Physiology.
	3	Algebra.....	Algebra.....	Algebra.
	4	Physical Geography.....	Phys Geog. and B'k-k'p'g.	Book-keeping.
	5	English Anal. and Comp.....	English Anal. and Comp ....	English Anal. and Comp.
FRESHMAN.	1	Algebra.....	Geometry.....	Geometry.
	2	Rhetoric.....	Rhetoric.....	Civil Government.
	3	French (elective).....	French (elective).....	French (elective).
	4	Physics.....	Physics.....	Physics.
	5	Shop Work Appliances.....	Roads, Streets & Pavements..	Descriptive Geometry.
SOPHOMORE.	1	Steam Engineering.....	Steam Engineering. ....	Machinery and Mill Work.
	2	Heat. ....	Machinery and Mill Work....	Machine Design.
	3	General Chemistry.....	General Chemistry.....	Elementary Mechanics.
	4	.....	.....	.....
	5	Trigonometry.....	Analytical Geometry.....	Analytical Geometry.

\* Drawing and Shop Work constitute the practical afternoon exercises.

A certificate will be given to those who complete the course.

COURSES OF STUDY—*Continued.*V.—CIVIL ENGINEERING COURSE FOR DEGREE OF BACHELOR OF CIVIL  
ENGINEERING (B. C. E). \*

CLASS.	PERIOD.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	1	Eng'ish Gram. and Comp.....	English Gram. and Comp.....	English Gram. and Comp.
	2	Arithmetic .....	Arithmetic .....	Arithmetic.
	3	Geography.....	United States History .....	United States History.
	4	Reading and Spelling .....	Reading and Spelling.....	Reading and Spelling.
SUB-FRESHMAN.	1	Elementary Botany.....	.....	.....
	2	.....	Elementary Zoology.....	Elementary Physiology.
	3	Algebra.....	Algebra.....	Algebra.
	4	Physical Geography .....	Phys Geog. and B'k-k'p'g.....	Book-keeping.
	5	English Anal. and Comp.....	English Anal. and Comp.....	English Anal. and Comp.
FRESHMAN.	1	Algebra .....	Geometry.....	Geometry.
	2	Rhetoric .....	Rhetoric .....	Civil Government.
	3	French (elective).....	French (elective).....	French (elective).
	4	Physics .....	Physics .....	Physics.
	5	Shop Work Appliances.....	Roads, Streets and Pavem'ts.	Descriptive Geometry.
SOPHOMORE.	1	General History.....	General History.....	General History.
	2	Heat.....	Surveying.....	Surveying.
	3	General Chemistry.....	General Chemistry.....	General Chemistry.
	4	French (elective).....	French (elective).....	French (elective).
	5	Trigonometry .....	Analytical Geometry.....	Analytical Geometry.
JUNIOR.	1	Steam Engineering.....	Geology .....	Economic Geology.
	2	Calculus .....	Calculus .....	Geodesy.
	3	Railroad Engineering.....	Railroad Engineering.....	Elementary Mechanics.
	4	Analytical Chemistry.....	Analytical Chemistry.....	Analytical Chemistry.
	5	German (elective).....	German (elective).....	German (elective).
SENIOR.	1	Applied Mechanics.....	Applied Mechanics .....	Engineering Structures.†
	2	Metallurgy.....	Masonry Construction.....	Sanitary Engineering.
	3	Astronomy.....	Bridge Engineering.....	Bridge Engineering.
	4	German (elective).....	German (elective) .....	German (elective).
	5	Hydraulic Engineering .....	Electrical Engineering.....	Bridges and Dams.

\* Drawing, Surveying, Shop Work and Laboratory Practice constitute the practical afternoon exercises. The Degree of C. E. will be given three years after graduation to those who by successful practice have proven themselves worthy.

† This will be supplemented by Lectures on Specifications and Laws of Contracts.

COURSES OF STUDY—*Continued.*

## VI.—SCIENTIFIC COURSE FOR DEGREE OF BACHELOR OF SCIENCE (B. S.).

CLASSES.	PERIOD.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	1	English Gram. and Comp.....	English Gram. and Comp.....	English Gram. and Comp.....
	2	Arithmetic .....	Arithmetic.....	Arithmetic.
	3	Geography.....	United States History.....	United States History.
	4	Reading and Spelling.....	Reading and Spelling.....	Reading and Spelling.
SUB-FRESHMAN.	1	Elementary Botany.....		
	2		Elementary Chemistry.....	Elementary Physiology.
	3	Algebra.....	Algebra.....	Algebra.
	4	Physical Geography.....	{ Physical Geography and Book-keeping.	Book-keeping.
	5	English Anal. and Comp.....	English Anal. and Comp.....	English Anal. and Comp.
FRESHMAN.	1	Algebra.....	Geometry.....	Geometry.
	2	Rhetoric .....	Rhetoric.....	Civil Government.
	3			
	4	Physics .....	Physics.....	Physics.
	5	Zoology.....	Zoology.....	Botany.
SOPHOMORE.	1	General History.....	General History.....	General History.
	2	Structural Botany.....	Physiology.....	Entomology.
	3	General Chemistry.....	General Chemistry.....	General Chemistry.
	4	Heat (optional).....		
	5	Trigonometry.....	Analytical Geometry.....	Analytical Geometry.
JUNIOR.	1	Mineralogy.....	Geology.....	Geology.
	2	Logic .....	Logic.....	{ Sanitary Engineering or Political Economy.
	3	Eng. Literature or German...	Eng. Literature or German...	Eng. Literature or Germ'n.
	4	Analytical Chemistry.....	Analytical Chemistry.....	Analytical Chemistry.
	5			
SENIOR.	1	Advanced Biology.....	Electrical Engineering.....	Advanced Biology.
	2	Metallurgy.....	French (optional).....	{ French or School Man- agement (optional).
	3	Astronomy.....	{ Surveying or History of Education }	Technical Chemistry.
	4	French (optional).....	Advanced Biology.....	Economic Geology.
	5	Psychology.....	Psychology and Ethics.....	Ethics.

COURSES OF STUDY—*Continued.*

## VII.—CLASSICAL COURSE FOR THE DEGREE OF BACHELOR OF ARTS (B. A.)

CLASSES.	PERIOD.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	1	English Gram. and Comp.....	English Gram. and Comp.....	English Gram. and Comp.
	2	Arithmetic.....	Arithmetic.....	Arithmetic.
	3	Geography.....	United States History.....	United States History.
	4	Reading and Spelling (opt'l)..	Reading and Spelling (opt'l)	Reading & Spelling (opt'l).
	5	Latin .....	Latin.....	Latin.
SUB-FRESHMAN.	1	Elementary Botany (opt'l)...	Elementary Zoology (opt'l)...	Book-keeping.
	2	Latin .....	Latin .....	Latin.
	3	Algebra.....	Algebra .....	Algebra.
	4	Physical Geography.....	Phys. Geog. and B'k-k'p'g....	Physiology (optional).
	5	English Anal. and Comp.....	English Anal. and Comp.....	English Anal. and Comp.
FRESHMAN.	1	Algebra.....	Geometry .....	Geometry.
	2	Rhetoric .....	Rhetoric .....	Civil Government.
	3	†Greek, †French.....	†Greek, †French.....	†Greek, †French.
	4	†Physics.....	†Physics .....	†Physics.
	5	Latin .....	Latin .....	Latin.
SOPHOMORE.	1	General History.....	General History.....	General History.
	2	Latin .....	Latin .....	Latin.
	3	†General Chemistry.....	†General Chemistry.....	†General Chemistry.
	4	†Greek, †French.....	†Greek, †French.....	†Greek, †French.
	5	Trigonometry.....	Analytical Geometry.....	Analytical Geometry.
JUNIOR.	1	†Mineralogy .....	†Geology.....	Political Economy.
	2	Logic .....	Logic .....	†Calculus.
	3	English Literature..	English Literature.....	English Literature.
	4	Latin.....	Latin .....	Latin.
	5	†Greek, †German.....	†Greek, †German .....	†Greek, †German.
SENIOR.	1	Latin .....	Latin .....	Latin.
	2	Anglo-Saxon..	Historical Grammar.....	English Philology.
	3	†Greek.....	†Greek..	†Greek.
	4	†German.....	†German, †Surveying.....	†German.
	5	Psychology.....	Psychology .....	Ethics.

† Of the studies thus marked in each term, one is required.

COURSES OF STUDY—*Continued.*

## VIII.—NORMAL COURSE.

CLASSES.	PERIOD.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	1	English Gram. and Comp ...	English Gram. and Comp.....	English Gram. and Comp.
	2	Arithmetic .....	Arithmetic .....	Arithmetic.
	3	Geography.....	United States History.....	United States History.
	4	Reading and Spelling (opt'l)...	Reading and Spelling (opt'l)...	Reading & Spelling (opt'l).
	5	Latin .....	Latin .....	Latin.
SUB-FRESHMAN.	1	Elementary Botany (opt'l)....	Pedagogics.....	.....
	2	Pedagogics.....	Elementary Chem. (opt'l)....	Elementary Physiology.
	3	Algebra.....	Algebra .....	Algebra.
	4	Latin or Phys. Geography....	{ Latin or Physical Geog.- and Book-keeping..... }	Latin or Book-keeping.
	5	English Anal. and Comp.....	English Anal. and Comp.....	English Anal. and Comp.
FRESHMAN.	1	Algebra.....	Geometry.....	Geometry.
	2	Rhetoric .....	Rhetoric.....	Civil Government.
	3	Zoology (optional).....	History of Education.....	School Management.
	4	Physics.....	Physics (optional).....	Physics (optional).
	5	Latin .....	Latin .....	Latin.
SOPHOMORE.	1	General History.....	{ General History or Sur- veying..... }	General History.
	2	Latin .....	Latin .....	Latin.
	3	General Chemistry.....	General Chemistry.....	General Chemistry (opt'l).
	4	Structural Botany (optional).	Science of Education.....	School Law.
	5	Trigonometry .....	Entomology (opt'l).....	Psychology.

A certificate of Licentiate of Instruction will be given to all who complete this course.



## SCHEDULE OF PRACTICAL EXERCISES, AFTERNOON WORK.

CLASSES,	DAY,	AGRICULTURAL COURSE.		
		FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	Monday.....	Shop.....	Shop.....	Shop.
	Tuesday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Wednesday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Thursday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Friday.....	Farm.....	Farm.....	Farm.
	Saturday.....	.....	Farm.....	.....
	.....	.....	.....	.....
SUB-FRESH-MAN.	Monday.....	Farm.....	Farm.....	Farm.
	Tuesday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Wednesday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Thursday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Friday.....	.....	Shop.....	.....
	Saturday.....	Shop.....	.....	Shop
	.....	.....	.....	.....
FRESHMAN.	Monday.....	Phys. lab.....	Phys. lab.....	Phys. lab.
	Tuesday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Wednesday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Thursday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Friday.....	.....	Shop.....	.....
	Saturday.....	Shop.....	.....	Shop.
	.....	.....	.....	.....
SOPHOMORE.	Monday.....	Farm.....	Farm.....	Farm.
	Tuesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Wednesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Thursday.....	Biol. lab. and drill.....	Biol. lab. and drill.....	Biol. lab. and drill.
	Friday.....	Biol. lab.....	Biol. lab.....	Biol. lab., farm or shop
	Saturday.....	.....	.....	.....
	.....	.....	.....	.....
JUNIOR.	Monday.....	Chem. lab.....	Chem. lab.....	Chem. lab.
	Tuesday.....	Farm and drill.....	Drill.....	Drill.
	Wednesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Thursday.....	Chem. lab. and drill.....	Chem. lab.....	Chem. lab. and drill.
	Friday.....	Chem. lab.....	Chem. lab.....	Chem. lab.
	Saturday.....	.....	Geol. survey.....	Geol. survey.
	.....	.....	.....	.....
SENIOR.	Monday.....	Farm.....	Farm.....	Farm.
	Tuesday.....	Farm and drill.....	Surveying and drill.....	Surveying and drill.
	Wednesday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Thursday.....	Farm and drill.....	Farm and drill.....	Farm and drill.
	Friday.....	Farm.....	Farm.....	Farm.
	Saturday.....	.....	.....	.....
	.....	.....	.....	.....

## SCHEDULE OF PRACTICAL EXERCISES.

(Continued.)

CLASSES.	DAY.	SCIENTIFIC COURSE.		
		FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	Monday.....	Farm or shop.....	Farm or shop.....	Farm or shop.
	Tuesday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Wednesday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Thursday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Friday.....	Farm or shop.....	.....	Farm or shop.
	Saturday.....	.....	Farm or shop.....	.....
SUB-FRESHMAN.	Monday.....	Farm or shop.....	Farm or shop.....	Farm or shop.
	Tuesday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Wednesday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Thursday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Friday.....	Farm or shop.....	.....	Farm or shop.
	Saturday.....	.....	Farm or shop.....	.....
FRESHMAN.	Monday.....	Phys. lab.....	.....	.....
	Tuesday.....	Biol. lab. and drill.....	Biol. lab. and drill.....	Biol. lab.
	Wednesday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Thursday.....	Biol. lab. and drill.....	Biol. lab. and drill.....	Biol. lab. and drill.
	Friday.....	Farm or shop.....	.....	Farm or shop.
	Saturday.....	.....	Farm or shop.....	.....
SOPHOMORE.	Monday.....	Farm.....	Farm.....	Farm.
	Tuesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Wednesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Thursday.....	Biol. lab. and drill.....	Biol. lab. and drill.....	Biol. lab. and drill.
	Friday.....	Biol. lab.....	Biol. lab.....	Biol. lab., farm or shop.
	Saturday.....	.....	.....	.....
JUNIOR.	Monday.....	Chem. lab.....	Chem. lab.....	Chem. lab.
	Tuesday.....	Farm or shop and drill.	Drill.....	Drill.
	Wednesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Thursday.....	Chem. lab. and drill.....	Chem. lab.....	Chem. lab. and drill.
	Friday.....	Chem. lab.....	Chem. lab.....	Chem. lab.
	Saturday.....	.....	Geol. survey.....	Geol. survey.
SENIOR.	Monday.....	Biol. lab.....	Biol. lab.....	Biol. lab.
	Tuesday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Wednesday.....	Biol. lab. and drill.....	Biol. lab. and drill.....	Biol. lab. and drill.
	Thursday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Friday.....	Farm or shop.....	Farm or shop.....	Farm or shop.
	Saturday.....	.....	.....	.....

## SCHEDULE OF PRACTICAL EXERCISES.

(Continued.)

CLASSES.	DAY.	CIVIL ENGINEERING COURSE.		
		FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	Monday.....	.....	.....	.....
	Tuesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Wednesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Thursday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Friday.....	Shop.....	Shop.....	Shop.
	Saturday.....	Shop.....	Shop.....	Shop.
SUB-FRESH-MAN.	Monday.....	Shop.....	Shop.....	Shop.
	Tuesday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Wednesday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Thursday.....	Draw and drill.....	Draw and drill.....	Draw and drill.....
	Friday.....	Draw.....	Draw.....	Draw.
	Saturday.....	.....	.....	.....
FRESHMAN.	Monday.....	Phys. lab.....	Phys. lab.....	Phys. lab.
	Tuesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Wednesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Thursday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Friday.....	Shop.....	Shop.....	Shop.
	Saturday.....	.....	.....	.....
SOPHOMORE.	Monday.....	Surveying.....	Surveying.....	Surveying.
	Tuesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Wednesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Thursday.....	Draw and drill.....	Draw and drill.....	Draw. and drill.
	Friday.....	Draw.....	Draw.....	Draw.
	Saturday.....	.....	.....	.....
JUNIOR.	Monday.....	Chem. lab.....	Chem. lab.....	Chem. lab.
	Tuesday.....	Surveying and drill.....	Surveying and drill.....	Surveying and drill.
	Wednesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Thursday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Friday.....	Draw.....	Draw.....	Draw.
	Saturday.....	.....	.....	.....
SENIOR.	Monday.....	Shop.....	Shop.....	Shop.
	Tuesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Wednesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Thursday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Friday.....	Survey.....	Survey.....	Survey.
	Saturday.....	.....	.....	.....

## SCHEDULE OF PRACTICAL EXERCISES.

(Continued.)

CLASSES.	DAY.	MECHANICAL ENGINEERING AND MANUAL TRAINING COURSE.		
		FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	Monday.....			
	Tuesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Wednesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Thursday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Friday.....	Shop.....	Shop.....	Shop.
	Saturday.....	Shop.....	Shop.....	Shop.
SUB-FRESH-MAN.	Monday.....	Shop.....	Shop.....	Shop.
	Tuesday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Wednesday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Thursday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Friday.....	Draw.....	Draw.....	Draw.
	Saturday.....			
FRESHMAN.	Monday.....	Phys. lab.....	Phys. lab.....	Phys. lab.
	Tuesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Wednesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Thursday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Friday.....	Shop.....	Shop.....	Shop.
	Saturday.....			
SOPHOMORE.	Monday.....	Surveying.....	Surveying.....	Surveying.
	Tuesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Wednesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Thursday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Friday.....	Draw.....	Draw.....	Draw.
	Saturday.....			
JUNIOR.	Monday.....	Chem. lab.....	Chem. lab.....	Chem. lab.
	Tuesday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Wednesday.....	Chem. lab. and drill.....	Chem. lab. and drill.....	Chem. lab. and drill.
	Thursday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Friday.....	Draw.....	Draw.....	Draw.
	Saturday.....			
SENIOR.	Monday.....	Shop.....	Shop.....	Shop.
	Tuesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Wednesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Thursday.....	Shop and drill.....	Shop and drill.....	Shop and drill.
	Friday.....	Shop.....	Shop.....	Shop.
	Saturday.....			

## SCHEDULE OF PRACTICAL EXERCISES.

(Concluded.)

CLASSES	DAY.	CLASSICAL AND NORMAL.		
		FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	Monday .....	Farm or shop.....	Farm or shop .....	Farm or shop.
	Tuesday .....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Wednesday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Thursday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Friday.....	Farm or shop.....	Farm or shop.....	Farm or shop.
	Saturday.....	.....	.....	.....
SUB-FRESH-MAN.	Monday .....	.....	.....	.....
	Tuesday .....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Wednesday .....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Thursday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Friday.....	Farm or shop.....	Farm or shop.....	Farm or shop.
	Saturday.....	Farm or shop.....	Farm or shop.....	Farm or shop.
FRESHMAN.	Monday .....	Farm or shop.....	Farm or shop.....	Farm or shop.
	Tuesday .....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Wednesday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Thursday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Friday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Saturday.....	.....	.....	.....
SOPHOMORE.	Monday .....	.....	.....	.....
	Tuesday .....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Wednesday.....	Draw and drill.....	Draw and drill.....	Draw and drill.
	Thursday.....	Farm or shop and drill.	Farm or shop and drill.	Farm or shop and drill.
	Friday.....	Farm or shop.....	Farm or shop.....	Farm or shop.
	Saturday.....	Farm or shop .....	Farm or shop.....	Farm or shop.
JUNIOR.	Monday .....	Farm, shop or ch'm. lab	Farm, shop or ch'm. lab	Farm, shop or ch'm. lab
	Tuesday .....	Farm or shop and drill	Farm or shop and drill.	Farm or shop and drill.
	Wednesday .....	{ Chem. lab., farm or shop and drill.....	Chem. lab., farm or shop and drill.....	Chem. lab., farm or shop and drill.....
	Thursday.....	.....	.....	.....
	Friday.....	Farm, shop or ch'm. lab	Farm, shop or ch'm. lab	Farm, shop or ch'm. lab
	Saturday.....	.....	.....	.....
SENIOR.	Monday .....	Farm or shop.....	Farm or shop .....	Farm or shop.
	Tuesday .....	Farm or shop and drill.	Surveying and drill.....	Surveying and drill.
	Wednesday.....	.....	Farm or shop and drill.	Farm or shop and drill.
	Thursday.....	.....	.....	.....
	Friday.....	Farm or shop.....	Farm or shop.....	Farm or shop.
	Saturday.....	.....	.....	.....





## POST GRADUATE COURSES.

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### REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS (M. A.):

Applicants for this degree must have previously taken the Degree of B. A., and in addition must take, at the University, for a full scholastic year, four daily studies appointed by the Faculty.

### REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE (M. S.):

Applicants for this degree must have previously taken the Degree of B. S., and in addition must take, at the University, for a full scholastic year, four daily studies appointed by the Faculty.

### REQUIREMENTS FOR THE DEGREE OF M. E. OR C. E.

The Degree of M. E. or of C. E. will be given after three years to those graduates of the Mechanical or Civil Engineering courses, who by successful practice prove themselves worthy.

### REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (PH. D.):

1. This degree will be conferred for distinguished attainments, as shown by examination and thesis, in any one of the five following languages: Latin, Greek, German, French and English, together with subordinate attainments in two others of the five; or for distinguished attainments in one principal, and two subordinate, of the following sciences: Chemistry, Physics, Geology, Biology; or for distinguished

attainments in Philosophy, or in Pure and Applied Mathematics.

2. This degree shall be open to persons who have received the Degree of B. A. or B. S. at this or other reputable institutions.

3. No applicant shall be admitted to examination for this degree before two full scholastic years from the date of his admission to the course shall have passed. The last of these two years must be passed by the candidate in resident study at the University.

4. Applicants for this degree must state in their application what particular line of study they wish to pursue.

5. A thesis showing original research shall be required of every applicant, the subject of which shall be announced and passed upon by a committee of the Faculty at least one year before the time set for the final examination, and the thesis itself must be presented to the committee two months before admission to the examination. Twenty-five copies of the approved and printed thesis shall be placed in the University library.

6. All applicants for this degree, who have previously taken the B. S. or M. S. Degree, must, by the end of the first year of the course, be sufficiently conversant with French and German to read with ease any scientific work written in these languages.

7. The fee for examination of applicants for the Degree of Ph. D. is \$35; for the M. A. or M. S. Degree, \$25 and for each Diploma, \$5.

DEPARTMENT OF  
AGRICULTURE, CHEMISTRY AND MINERALOGY.

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ALBERT E. MENKE, SUPERINTENDENT.  
G. L. TELLER, ADJUNCT PROFESSOR.  
W. F. BATES, FOREMAN OF FARM.

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The Agricultural Department is designed and organized to give both theoretical and practical instruction in the various branches of agriculture. The farmers have realized that there is no art, profession or occupation which demands more careful study than agriculture; that special preparation is needed no less for the pursuit of agriculture than for law, medicine or divinity, and that proper provision should be made for teaching so important a subject in the State University. It is the policy of the present management to unite practice with theory, under the belief that in no other way beneficial results can be obtained. The equipments for practical work will compare favorably with those of any other successful agricultural college. The agricultural machinery on hand is of the newest and most approved pattern. In addition to the ordinary implements, we have a Victor manure spreader; rear-pressure shoe-drill; Aspinwall potato planter, with corn and fertilizer attachments; disc harrow, etc. The use of all this machinery is to give the student an insight into labor-saving devices, with a view to their economic employment. We have two commodious barns that will accommodate forty-one head of stock, machinery, feed, etc. There has also been recently constructed a fine dairy and ice-house, built in accordance with tested plans. On the

farm the student can become acquainted with the telling points of good stock, as he can see specimens of pure Devons, Holsteins, Sussex, Jerseys, Herefords, Galloways, grade Durhams, etc. We have a large vineyard and orchard for practical horticultural work. The students are interested in and do all the practical work that occurs on either a stock, dairy, fruit or cropped farm. The purely agricultural classes in the course are Agriculture, Horticulture, Stock Breeding, Stock Feeding, Agricultural Chemistry, Veterinary Anatomy, Veterinary Science, Dairying. The various closely-related branches are also provided for, as may be seen in the schedule. The following is a more detailed description of the instruction given in the different classes.

#### AGRICULTURE.

*Reclamation of Land.*—Clearing, stumping, stoning, fallowing.

*Selection of farms for special purposes.*

*Rotation in Cropping.*—Importance and necessity of rotation, principles underlying it, rotations suitable to different kinds of soil, examination and criticism of different systems of rotation.

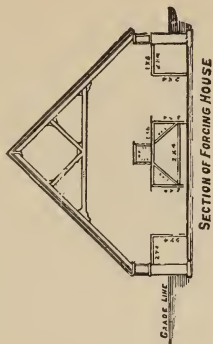
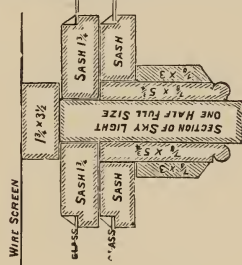
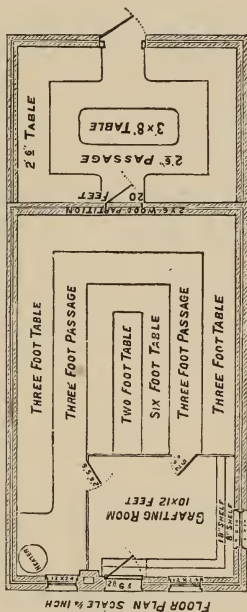
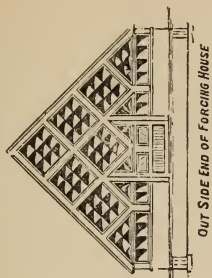
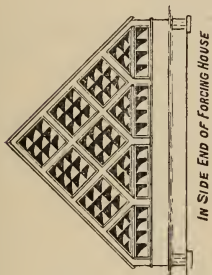
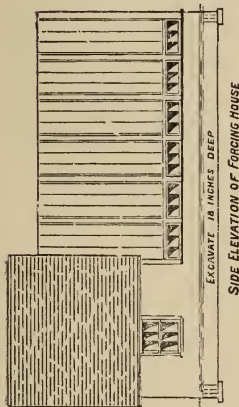
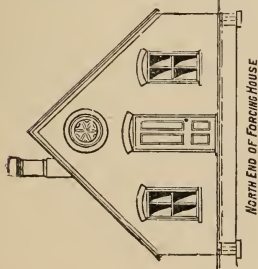
*Buildings.*—Location of houses, barns and stables; stables for horses, sheep and cattle.

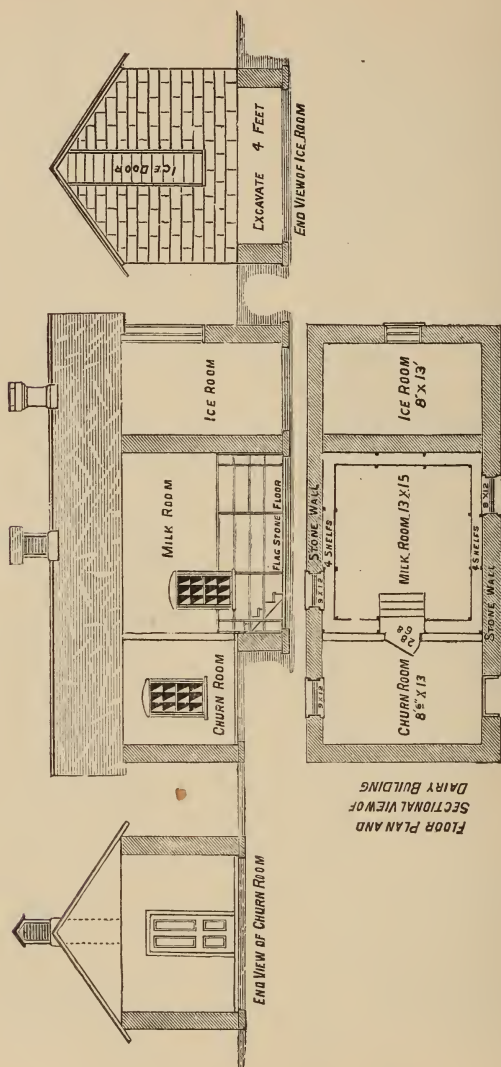
*Implements and Machinery.*—Principles in construction of implements and machinery, points to be aimed at, classification, examination and description of same.

*Preparation of Soil.*—Modes of preparation for different crops, modes suited to various kinds of soil.

*Preparation of Manures and Composts.*—Home-made fertilizers.







*Improvement of Lands.*—Ordinary cultivation, sub-soiling, fallowing, draining, manuring.

*Roots.*—Cultivation of roots and tubers.

*Green Fodders.*—Lucerne, clover, grasses, etc.

*Miscellaneous.*—Cultivation of various other crops, management of pastures, etc.

## HORTICULTURE.

Preparation of soils for horticultural and floricultural purposes; management of plants, including methods of preparation; horticultural implements; methods of obtaining new varieties of vegetables, fruits and flowers; arrangement and care of flower and kitchen gardens, nurseries and orchards; practical green-house work by the student supplements the lectures.

## STOCK BREEDING.

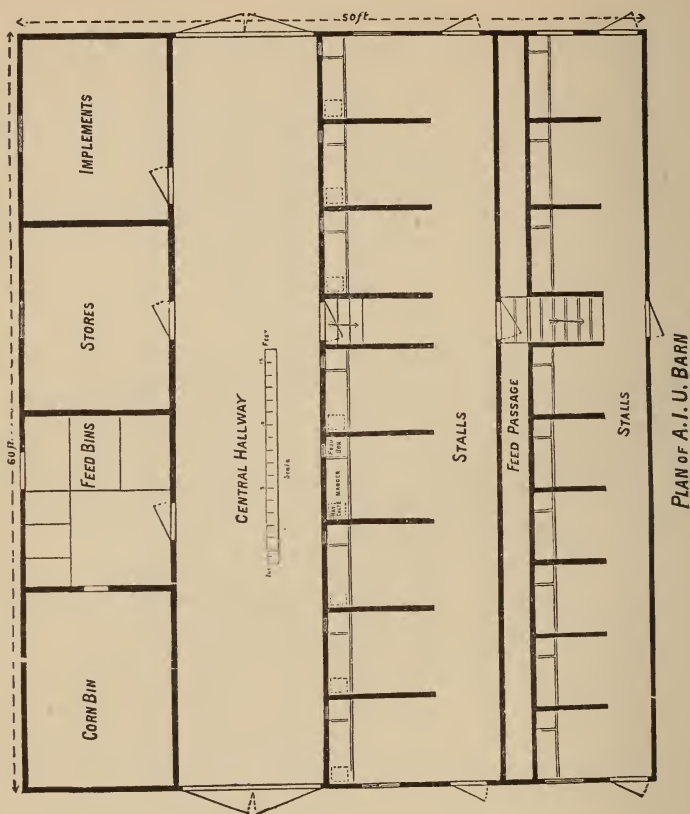
Breeding stock as an art; heredity of normal characters; heredity of diseases; heredity of acquired and abnormal characters; atavism; law of correlation; variation; fecundity; in-and-in breeding; cross-breeding; relative influence of parents; form of animals as an index of qualities, etc.

## STOCK FEEDING.

Rations; nitrogenous foods; non-nitrogenous foods; principles of alimentation; effect of food on flavor of flesh; feeding young animals; money value of feeding stuffs; how to compound a ration economically; soiling; the economy of young beef; cost of beef; feeding steers; gain per day; the fat stock shows; summer feeding; feeding dairy cattle; feeding work stock; feeding horses, sheep, swine; effect of food on quantity of milk, etc.

## VETERINARY ANATOMY.

A knowledge of the structure of the horse and other domesticated animals is acquired in this class. The instruction comprises lectures and demonstrations. The lectures include: First, a description of the locomotary apparatus, viz.: the bones, articulations and muscles; second, a description of the viscera; third, a description of the relations of the blood vessels and nerves, and of the brain and organs of the senses.



#### VETERINARY SCIENCE.

This includes (to the extent useful to the practical agriculturist) the physiology of the various farm animals, their pathology or principal diseases—constitutional and local—and their treatment; the general principles to be followed in acute diseases in absence of professional assistance; the nursing and dieting of sick animals. The lectures are illustrated by diagrams, sketches and preparations, and also by any cases that may appear on the farm.

#### DAIRYING.

Agreeably to the prescribed order of studies, thorough instruction is given to the students both in the theory and practice of dairying, including the effects of food on milk products; the treatment of milk and cream; the manufac-

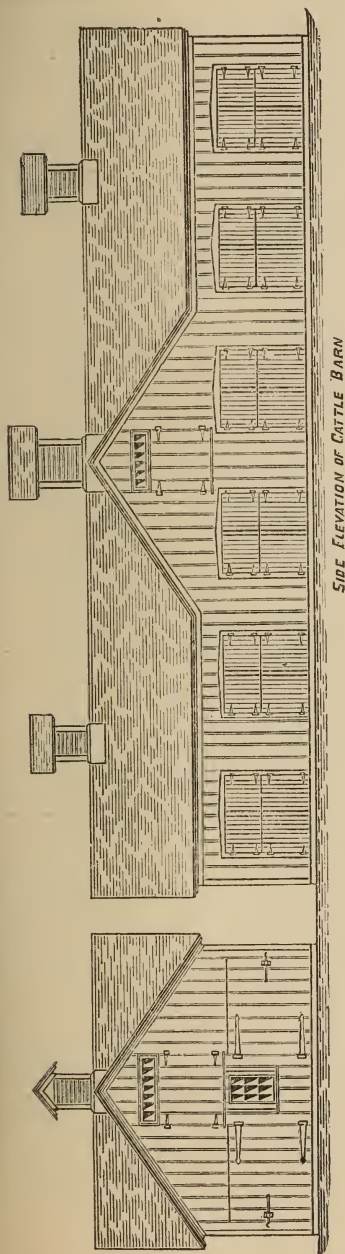
ture of butter and cheese according to the principal system, with practical demonstrations of the uses of implements and machines.

#### CHEMISTRY.

The Chemical laboratory consists of a commodious lecture room, provided with water-sinks, pneumatic troughs, tables for illustration, and cases for chemicals and apparatus; two analytical laboratories with work-tables, desks, shelves and drawers for forty students, water and gas supply, vacuum pumps, hoods, etc., and a balance-room containing two pairs of Becker's best chemical balances.

The course embraces inorganic organic, analytical, agricultural and industrial chemistry. Instruction is given by means of text-books, lectures, class illustrations and laboratory practice. A general idea of the course may be gleaned from the following synopsis:

*Agricultural Chemistry.*—Soil, air and water in their relations to the plant. The food of plants; manures, general and special; chemical principles of tillage, irrigation, systems of rotation and of special crops and farms; the means of determining fodder, values, etc.





*Industrial Chemistry.*—Lectures on the manufacture of technical products.

*Inorganic Chemistry.*—This class is instructed in thorough sympathy with the views of Mendeljeff, Lothar Meyer and Thomsen on modern chemistry.

*Organic Chemistry.*—Constitution of organic compounds ; hydrocarbons ; alcohols ; aldehydes, acids and their derivatives ; constitution of oils and fats, sugars, starch, cellulose, albuminoids, essential oils, alkaloids, etc.

*Practical Chemistry.*—During the first term of the junior year the student becomes acquainted with the methods and literature of qualitative analysis. The practical work is taught by laboratory practice and lectures. The second and third terms of this year are devoted to quantitative chemical analysis, the instruction being given by similar methods. The laboratory work begins with the determination of metals in simple compounds, followed by analyses of ores, commercial fertilizers, milks, food products, etc. During the last term a short course in assaying is given.

*Technical Chemistry.*—A course of lectures in the manufacture of commercial products that require chemical manipulation.

#### MINERALOGY.

*Metallurgy.*—Lectures on metals and their applications.

The Mineralogical laboratory is provided with worktables, blow-pipes and lamps for twenty students, and other facilities for the determination of minerals. This laboratory also contains combustion, crucible, muffle and roasting furnaces for both coal and gas, water supply, hoods, vacuum pumps, ore-crusher, grinder and samplers, and is provided with Bunsen burners.

The study of Mineralogy includes the study of crystallography with the occurrence, properties, forms and uses of the principal minerals. Determinative mineralogy forms the most important part of the course, and is studied practically with the aid of lens, magnet, blow-pipe and simple

analysis. Especial attention is given to the determination of the minerals and the assaying of the ores of the State.

#### AGRICULTURAL JOURNALS.

We believe that the mind is strengthened by the intelligent perusal of good papers, and also that the farmer who reads the best agricultural papers will be able to intelligently realize the experience of others. We keep the following list of papers on file for the benefit of agricultural students in particular :

Rural and Workman, Little Rock, Ark.  
 Arkansas Stockman, Little Rock.  
 Breeder's Gazette, Chicago, Ill.  
 Farmer's Review, Chicago, Ill.  
 American Farmer, Baltimore, Md.  
 Southern Cultivator, Atlanta, Ga.  
 Prairie Farmer, Chicago, Ill.  
 Texas Stockman, San Antonio, Texas.  
 Breeder's Journal, Beecher, Ill.  
 Grange Bulletin, Cincinnati, O.  
 Rural World, St. Louis, Mo.  
 Journal of Agriculture, St. Louis, Mo.  
 Industrialist, Manhattan, Kan.  
 Country Gentleman, Albany, N. Y.  
 Canadian Entomologist, Toronto, Ont.  
 Kentucky Stock Farm, Lexington, Ky.  
 Live Stock Journal, London, England.  
 Chemical Society's Journal, London, England.  
 Royal Agricultural Society's Journal, London, England.  
 Home and Farm, Springfield, Mass.  
 Western Resources, Omaha, Neb.

The majority of the above journals are donated by their respective publishers, to whom we are very thankful.

TABLE SHOWING DISTRIBUTION OF TIME IN SHORT AGRICULTURAL COURSE.

SUBJECT.	CLASS.				Total Hours.
	A.	Sub-Freshman.	Freshman.	Sophomore.	
English, History, etc.....	390	195	130	130	845
Mathematics.....	130	130	130	.....	390
General Science.....	.....	195	173 $\frac{1}{3}$	130	498 $\frac{1}{3}$
Agricultural Sciences.....	.....	.....	86 $\frac{2}{3}$	260	346 $\frac{2}{3}$
Drawing.....	195	195	195	195	780
Farm Work.....	260	260	173 $\frac{1}{3}$	130	823 $\frac{1}{3}$
Laboratory Work.....	.....	.....	86 $\frac{2}{3}$	130	216 $\frac{2}{3}$
Shop Work.....	130	130	130	130	520
Theoretical Work.....	520	520	520	520	2380
Practical Work.....	585	585	585	585	2340
Total Work.....	1105	1105	1105	1105	4420

TABLE SHOWING DISTRIBUTION OF TIME IN B. S. A. COURSE.

SUBJECT.	CLASS.						Total Hours.
	A.	Sub-Fresh-man.	Fresh-man.	Sophomore.	Junior.	Senior.	
English, History, etc.....	390	195	130	130	.....	43 $\frac{1}{3}$	888 $\frac{1}{3}$
Mathematics.....	130	130	130	86 $\frac{2}{3}$	.....	.....	476 $\frac{2}{3}$
General Science.....	.....	195	216 $\frac{2}{3}$	216 $\frac{2}{3}$	260	86 $\frac{2}{3}$	975
Agricultural Sciences.....	.....	.....	43 $\frac{1}{3}$	86 $\frac{2}{3}$	260	390	780
Drawing.....	195	195	195	195	.....	.....	780
Surveying.....	.....	.....	.....	.....	86 $\frac{2}{3}$	86 $\frac{2}{3}$	93 $\frac{1}{3}$
Farm Work.....	260	260	173 $\frac{1}{3}$	130	303 $\frac{1}{3}$	303 $\frac{1}{3}$	1430
Laboratory Work.....	.....	.....	86 $\frac{2}{3}$	130	195	195	506 $\frac{2}{3}$
Shop Work.....	130	130	130	130	.....	.....	520
Theoretical Work.....	520	520	520	520	520	520	3120
Practical Work.....	585	585	585	585	585	585	3510
Total Work.....	1105	1105	1105	1105	1105	1105	6630

## TEXT AND REFERENCE BOOKS.

*Soph. Inorganic Chemistry.*—Richter, Wurtz, Muir, Miller, Roscoe and Schorlemmer.

*Organic Chemistry.*—Remsen, Richter, Beilstein, Roscoe and Schorlemmer.

*Analytical Chemistry.*—Jones, Fresenius, Caldwell and Babcock.

*Mineralogy.*—Brush, Dana.

*Agriculture.*—Warrington, Gulley, Allen, Storer, Tanner.

*Horticulture.*—Downing, Bailey, etc.

*Verterinary Anatomy.*—Strangeway, Cheveau.

*Veterinary Science.*—Williams, McFadden.

*Stock Breeding.*—Miles.

*Stock Feeding.*—Stewart, Armsby.

*Dairy Husbandry.*—Stewart, etc.

*Metallurgy.*—Bloxam, Wright.

*Technical Chemistry.*—Wagner, Post.

# PHYSICS.

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A. E. MENKE, PROFESSOR.

G. L. TELLER, ADJUNCT PROFESSOR.

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This course embraces recitations upon text-books, lectures, class illustrations and experiments in the physical laboratory. The general course extends throughout the Freshman year, and consists of the study of heat, light, sound, electricity and magnetism.

*Text and Reference Books.*—Ganot's Physics, Worthington's Physical Laboratory Practice, Meyer's Experiments in Light and Sound, Pickering's Physical Measurements, Olmstead's Natural Philosophy, Tyndall on Light, Sound and Heat, *Stuart's Heat*, Stewart's Heat, Sylvanus Thompson's Electricity, Day's Electric Light Arithmetic, Day's Exercises in Electrical Measurements, Murdock's Notes on Electricity and Magnetism, *Kempe's Hand-Book of Electrical Testing*, Hopkins.

DEPARTMENT OF  
MECHANIC ARTS AND ENGINEERING.

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J. M. WHITHAM, PROFESSOR.  
GEO. C. SCHOFF, ADJUNCT PROFESSOR.  
G. P. EUSTAGE, INSTRUCTOR IN METAL WORK.  
A. C. HOAG, INSTRUCTOR IN WOOD WORK.  
R. F. BEARDSLEY, INSTRUCTOR IN FORGE AND FOUNDRY.  
A. G. TAFF, INSTRUCTOR IN FIELD ENGINEERING.

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Courses of instruction are offered in

1. Manual Training.
2. Mechanical Engineering.
3. Civil Engineering.

I.—COURSE IN MANUAL TRAINING.

The course in Manual Training, covering four years, is intended to prepare young men to obtain employment in the machine shop, forge and foundry, and at the wood-worker's bench. It replaces the old apprenticeship system, and, at the same time, gives the youth instruction in English, mathematics, science, drawing, the principles of mechanism and steam engineering. The recent growth of Manual Training Schools, not only here, but in Europe, is phenomenal. The apprenticeship system is now practically obsolete; hence the need of Manual Training Schools. The only opportunity offered to the youth of the State to obtain this instruction is given here.

Theoretical instruction given in the morning is indicated on page 37. That of the afternoon consists of practice for five hours a week in drawing, and ten hours in the training shops.



TABLE SHOWING THE DISTRIBUTION OF TIME IN HOURS IN  
THE MANUAL TRAINING COURSE.

SUBJECTS.	CLASS,				Total Hours.
	A.	Sub-Freshman.	Freshman.	Sophomore.	
English, History, etc.....	390	247	130	$86\frac{2}{3}$	$853\frac{2}{3}$
Science .....		143	130	$86\frac{2}{3}$	$359\frac{2}{3}$
Pure Mathematics.....	130	130	130	130	520
Applied Mathematics.....			130	$216\frac{2}{3}$	$346\frac{1}{3}$
Shop Work.....	390	390	390	$346\frac{2}{3}$	$1516\frac{2}{3}$
Mechanical Drawing.....			195	195	790
Laboratory Work.....				$43\frac{1}{3}$	$43\frac{1}{3}$
Total Theoretical Work .....	520	520	520	520	2080
Total Practical Work.....	585	585	585	585	2340
Total Work.....	1105	1105	1105	1105	4420

*The subjects taught in the Training Shops are—1, carpentry and joinery; 2, wood turning; 3, cabinet making and practical carpentry; 4, pattern making; 5, foundry work; 6, forging; 7, metal fitting; 8, machine tool work; 9, care of steam machinery. The distribution of these subjects throughout the four years is shown in the following:*

SCHEME SHOWING COURSE OF SYSTEMATIC INSTRUCTION IN  
WORK-SHOPS.

CLASSES.	SECTION.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A	A	Principles of Carpentry and Joinery.	Wood Turning, $\frac{1}{2}$ term. Practical Cabinet and Carpentry Work.	Practical Cabinet and Carpentry Work.
	B	Wood Turning, $\frac{1}{2}$ term. Principles of Carpentry and Joinery, $\frac{1}{2}$ term.	Principles of Carpentry and Joinery, $\frac{1}{2}$ term. Practical Cabinet and Carpentry Work.	Practical Cabinet and Carpentry Work.
	C	Principles of Carpentry and Joinery, $\frac{1}{2}$ term. Wood Turning.	Principles of Carpentry and Joinery, $\frac{1}{2}$ term. Practical Cabinet and Carpentry Work.	Practical Cabinet and Carpentry Work.
SUB-FRESHMAN.	A	Forging.	Forging, $\frac{1}{2}$ term. Foundry Work, $\frac{1}{2}$ term.	Foundry Work.
	B	Foundry Work.	Foundry Work, $\frac{1}{2}$ term. Forging, $\frac{1}{2}$ term.	Forging.
FRESHMAN.	A	Foundry Work.	Pattern Making.	Metal Fitting.
	B	Metal Fitting.	Foundry Work.	Pattern Making.
	C	Pattern Making.	Metal Fitting.	Foundry Work.
SOPHOMORE.		Machine Tool Work—engine, lathe, planers, drilling machine, milling machine, etc.	Machine Tool Work—engine lathe, planers, drilling machine, milling machine, etc.	Machine Tool Work—engine lathe, planers, drilling machine, milling machine, etc.

\* One student from this class is with engine and boiler.

Junior and senior students have an advanced course in the various shops.

## EQUIPMENTS OF THE MANUAL TRAINING SHOPS.

*The Training Shops are located in a new building, and are conveniently arranged and well equipped. There are four principal shops, viz: The Wood-working, Foundry*

and Molding, the Forging, and the Machine Shops; also, there are other rooms auxiliary to these, as the Engine and Boiler-Rooms, the Tool-Room, Cloak-Room, Finishing-Room, and Supply Rooms. In equipping these shops, those institutions of a similar nature were studied, compared and improved upon as much as circumstances would permit.

*The Wood-Working Shop* is equipped with eighteen well appointed work benches with tools, seven turning lathes, one double circular saw, one scroll saw, one band saw, one reversible shaping machine, one planing machine, and one steam glue heater.

*The Equipments of the Forging Shop* at present consist of nine forges of the most improved design, nine anvils, and nine sets of tools, consisting of hand-hammer, tongs, calipers, steel rule, steel square, hot and cold cutters, file, flatter, fullers, swedges, punches, heading tools, etc. The forges are supplied with power blast, a No. 6 Buffalo blower serving for this purpose. This shop has, also, a double emery grinder.

*The Moulding-Room and Foundry* are equipped with a Collan cupola which will melt from 200 pounds to one ton of iron at once, one brass furnace, nine sand troughs and moulder's benches combined, nine sets of moulder's tools, consisting of heart and square trowel, slickers, rammers, riddle, flask, swab, water pot, shovel, lifters, drawer, spikes, etc., six ladles from 100 to 5 pounds capacity, an assortment of flasks, and other necessities for a complete foundry.

*The Equipments of the Machine Shops* are thirteen work-benches with vises, sets of tools and closets, one twelve-inch engine lathe, three fourteen-inch engine lathes, one nineteen-inch engine lathe, one speed lathe, one planer 24x24x72 inches, one planer 10x10x24 inches, one Universal milling machine (B. & S.), one double-wheel emery grinding machine, one drill press, one grinding stone, and chucks and other appliances for use on the lathes, planers, etc. Each machine has its distinct set of tools. This shop is well equipped with hammers, steel rules,

steel squares, spring dividers, chisels, twist drills, taps, dies, tap wrenches, die stocks, reamers, pipe dies, files of all sizes and shapes, wrenches, arbors, lathe-dogs, squares, scales, calipers (inside and outside), machine and hand-cutting tools, a surface gauge, a Victor micrometer caliper, a protractor and many other tools. The machinery is driven by a 25 horse-power Westinghouse engine.

#### CAPACITY OF THE SHOPS.

Seventy-five students can be accommodated in the shops at one time, divided among the rooms as follows:

Wood-working Room.....	24
Metal-working Room.....	18
Forging Room.....	9
Foundry.....	20
Tool-Room.....	1
Engine and Boiler-Room.....	3

*The Boiler-Room* contains two horizontal flue tubular boilers set in brick work, aggregating 65 horse-power. These are used for heating the main building and running the shops. This room also contains a pressure-reducing valve, an automatic heater-trap and governor, Blake pump, gauges and other necessary appliances.

## II.—COURSE IN MECHANICAL ENGINEERING.

Mechanical engineering may be defined as being the application of mathematics to science, with particular reference to the *design and fabrication* of all forms of machinery. Since engineering is the combined science and art of utilizing the forces and materials of nature, and since this utilization is accomplished in nearly all cases by machines, or by processes working through machines, it is evident that *mechanical engineering is the basis of all art and industry.*

The course of study is published on page 39. It is based on the belief that a mechanical engineer should be a mathematician, a scientist, a draughtsman and a mechanic. The course extends over six years, and consists of 3,120 *hours devoted to theoretical*, and 3,510 *hours to practical instruction.* The distribution of time among the several branches, both theoretical and practical, is shown in the following.

TABLE SHOWING DISTRIBUTION OF TIME IN HOURS DEVOTED TO STUDIES IN THE MECHANICAL ENGINEERING COURSE.

SUBJECTS.	CLASS.						Total Hours.
	A.	SUB-FRESH-MAN.	FRESH-MAN.	SOPHOMORE.	JUNIOR.	SENIOR.	
English, History, etc.....	390	247	130	86 $\frac{2}{3}$	.....	.....	858 $\frac{2}{3}$
Science.....	.....	143	130	17 $\frac{1}{3}$	130	86 $\frac{2}{3}$	663
Pure Mathematics.....	130	130	130	130	130	.....	650
Engineering Studies.....	.....	.....	130	130	26	43 $\frac{1}{3}$	953 $\frac{1}{3}$
Shop Work.....	390	390	390	303 $\frac{1}{3}$	43 $\frac{1}{3}$	399	1906 $\frac{2}{3}$
Drawing.....	195	195	195	195	97 $\frac{1}{2}$	195	1072 $\frac{1}{2}$
Surveying, Practice.....	.....	.....	.....	86 $\frac{2}{3}$	.....	.....	86 $\frac{2}{3}$
Laboratory Work.....	.....	.....	.....	.....	444 $\frac{1}{6}$	.....	444 $\frac{1}{6}$
Theoretical Work.....	520	520	520	520	520	520	3120
Practical Work.....	585	585	585	585	585	585	3510
Total Work.....	1105	1105	1105	1105	1105	1105	6630

In addition to the above, students may take French and German as elective studies.

The courses in Mechanical and Civil Engineering differ only in the work of the Junior and Senior years. Even during these years many subjects are included in both. The branches studied are named on page 41, and described on page 71.

### III.—COURSE IN CIVIL ENGINEERING.

Civil Engineering, as here understood, embraces the location and construction of railroads, canals, waterworks, sewerage systems, foundations on land and in water, tunnels and superstructures; the surveys, improvements and defenses of coasts, harbors, rivers and lakes; the application of mechanics, descriptive geometry and graphics to the design and construction of arch bridges, roofs, trusses and suspension bridges; the design and fabrication of wind, hydraulic and electric motors, and air and heat engines; irrigation and drainage of lands; and the preparation of forms of specifications and contracts.

The course of study, published on page 41, is believed to compare favorably with that in many of the older institutions of technology. It is decidedly a *practical* course, and the graduate is well equipped for the duties of an engineer. He is, also, an,



excellent draughtsman and mechanic. The time in *hours* devoted to theoretical and practical instruction is shown in the following:

TABLE SHOWING DISTRIBUTION OF TIME IN HOURS DEVOTED TO STUDIES IN THE CIVIL ENGINEERING COURSE.

CLASS.	CLASS.						Total Hours.
	A.	SUB-FRESH-MAN.	FRESH-MAN.	SOPHOMORE.	JUNIOR.	SENIOR.	
English, History, etc.....	390	247	130	86 $\frac{2}{3}$	.....	.....	853 $\frac{1}{3}$
Science.....	.....	143	130	173 $\frac{1}{3}$	216 $\frac{2}{3}$	86 $\frac{2}{3}$	749 $\frac{2}{3}$
Pure Mathematics.....	130	130	130	130	130	.....	650
Engineering Studies.....	.....	.....	130	130	173 $\frac{1}{2}$	433 $\frac{1}{3}$	866 $\frac{2}{3}$
Shop Work.....	390	390	390	260	.....	260	1690
Drawing.....	195	195	195	195	65	195	1040
Surveying, Practice.....	.....	.....	.....	130	216 $\frac{2}{3}$	130	476 $\frac{2}{3}$
Laboratory Work.....	.....	.....	.....	.....	303 $\frac{1}{3}$	.....	303 $\frac{1}{3}$
Total Theoretical Work.....	520	520	520	520	520	520	3120
Total Practical Work.....	585	585	585	585	585	585	3510
Total Work.....	1105	1105	1105	1105	1105	1105	6630

In addition to the above, students may take French and German as elective studies.

## ENGINEERING STUDIES FOR THE MECHANICAL AND CIVIL ENGINEERING COURSES.

**SURVEYING**, as a study, covers two terms. It embraces the care, use and adjustment of instruments, and the elements of land, topographical, hydrographic, mining, city and geodetic surveying. *Text-book*—Johnson or Gillespie. The course of surveying practice in the field covers three years, aggregating 470 hours. It is divided as follows:

*Sophomore Year*.—Use of chain, tape, compass, transit, solar attachment, level, sextant and plane table. The students have exercises in land, city, topographical, mining and hydrographic surveying.

*Junior Year*.—Road engineering, consisting of reconnaissance, preliminary survey, location, profiling, establishing grade, location of curves and turnouts, cross-section leveling, locating slope stakes, measuring embankments and cuts, estimates of volume and materials used in construction, improvement of highways, location and estimates for tunnels.

A term is also devoted to the study of geodesy, embracing location of base-line, repeated measurements of base by various methods, location and establishment of signals, manufacture and location of station marks, measuring, distributing errors and correcting angles, tertiary triangulation of the neighborhood, geodetic and precise spirit leveling.

*Senior Year* consists of: 1. Sanitary survey of Fayetteville, embracing estimates of material required and cost of construction of a complete sewerage system. 2. Hydraulic surveying, consisting of location of waterworks for the city of Fayetteville, embracing complete details, estimates and costs.

**ROAD ENGINEERING** consists of a term devoted to the description of the various forms and methods of constructing roads, streets and pavements, followed by two terms' study of railroad location and maintenance. The *text-books* used are Gilmore, Johnson (or earthwork and topography), Trautwine (for earthwork), Searles (for curves and turnouts), Parson (for maintenance

of way). The text-books are supplemented by lectures, notes and exercises.

SANITARY ENGINEERING consists of a term devoted to the study of the separate and combined systems of sewerage and constructive details. This is followed by the designing of a sewerage system for Fayetteville, as already stated. *Text-books*—Latham, Stanley and Pierson.

HYDRAULIC ENGINEERING is studied with special reference to the design and location of water-works. It comes in the Senior Year, in order that stand-pipes, retaining walls, dams, etc., may be properly designed. The study is illustrated by the design of water-works for Fayetteville. *Text books*—Fanning, Merriman and Lectures.

ARCHES AND DAMS are made a special study for one term. Greene's work on Arches (graphical) is used, while it is supplemented by the study of existing structures. No text-book is used in the study of dams, but the literature found in the numerous engineering periodicals, and existing structures, form the basis for the class instruction.

BRIDGE ENGINEERING covers two terms and is taught analytically and graphically. Numerous exercises are required illustrating nearly every form of bridge used for highways or railroads. *Text-books*—Burr, Waddell, Merriman.

The constructive details are studied from blue prints, etc., kindly supplied by various bridge building establishments.

STUDY OF ENGINEERING WORKS:—One term is devoted to the special study of recent engineering structures, prominence being given to the various forms of foundations and tunnels. It also embraces the study of the actual use of coffer-dams, caissons, jetties, irrigation canals, etc. *Text-book*—Engineering Periodicals.

SPECIFICATIONS AND CONTRACTS:—The forms used in writing specifications and the law of contracts are studied in detail from lectures.

STEAM ENGINEERING is taught from a descriptive standpoint to the civil engineering students. *Text-book*—Whitham.

For mechanical engineering students it embraces two terms.

of descriptive study. *Text-books*—Whitham, Wilson (boilers); one term on thermodynamics; one term to boiler design, taught by lectures; one term to steam engine design. *Text-book*—Whitham, and one term the study of valve gears (lectures).

**TESTS OF STEAM MACHINERY:**—This is taught without a text-book, and consists in the study of the report of tests made by engineers, and the actual testing of machinery used in the shops and elsewhere.

**MECHANISM:**—One term is devoted to the elementary principles. *Text-books*—Wood and Stahl, and two terms to the study of machinery and mill-work.

One term is devoted to the study of machine design (Unwin)

**MECHANICS:**—One term is devoted to the elements (*Text-book*—Peck, supplemented by teacher's notes), and two terms to applied mechanics. Mechanics is taught from a purely calculus standpoint.

**ELECTRICAL ENGINEERING:**—See description on page 63, under the heading Department of Physics. *Text-books*—Kemp, Day.

**MASONRY CONSTRUCTION:**—(Baker).

**DRAWING:**—Instrumental drawing is required during four years for all male students in the college department, irrespective of course of study and for engineering students of the A and Sub-Freshman classes.

Engineering students devote a term to the study of Descriptive Geometry (Waldo).

The following college course is for engineering students, and is somewhat modified for students in other departments, as is shown to be necessary:

*Freshman Year.*—Instruction in use of instruments, practice in reading, drawings, construction of geometrical figures, elements of mechanical drawing. Great prominence is given to the study of descriptive geometry.

*Sophomore Year*—Mechanical drawing during the first term, and topographical drawing during the second and third terms.

*Junior Year.*—Architectural drawing, linear and isometrical projections.

*Senior Year*—Each student makes a design and general and detailed drawing of some structure, such as a bridge or steam engine.

The Draughting Room is equipped with tables, stools, planimeter, pantograph and blue-print frame. Materials are kept on hand and supplied to students at catalogue rates. Drawing instruments are purchased at 25 per cent discount.



DEPARTMENT OF  
PSYCHOLOGY, ETHICS AND POLITICAL ECONOMY.

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E. H. MURFEE, PRESIDENT.  
J. F. HOWELL, ASSISTANT.

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PSYCHOLOGY AND ETHICS.

These important studies are taught inductively, no theory or doctrine being urged for acceptance which is not based upon a philosophical induction from the facts of consciousness. The student is taught to subject every statement of fact or principle to the test of his own experience. The fullest and freest discussion of opposing views is encouraged.

POLITICAL ECONOMY.

The aim is to give a succinct statement of the undisputed principles of political economy, and to discuss conflicting views with all possible fairness.

CIVIL GOVERNMENT.

In a free country like ours, it is highly important that young men especially be taught the principles of Republican government, both State and National. The aims in teaching this branch of political science are :

- (1) To give an outline of the history of our political rights and their bearing on national growth and progress.
- (2) To have the students analyze carefully the Constitution of the United States and of Arkansas, and learn the nature of official duties in all the branches of government.
- (3) To exhibit the forms and character of the important State papers that have been promulgated in our history.

## TEXT AND REFERENCE BOOKS.

*Psychology*.—McCosh, Bascom, Mahan, Porter, Sir William Hamilton.

*Ethics*.—Dagg, Alexander, Bascom, Porter, Calderwood.

*Political Economy*.—Chapin, Mill, Say, Perry.

*Civil Government*.—Thorpe's and Cocker's Civil Government, Townsend's Analysis, and Anderson's Manual of the Constitution.

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DEPARTMENT OF  
MATHEMATICS, LOGIC AND ASTRONOMY.

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O. C. GRAY, PROFESSOR.

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## MATHEMATICS.

This subject should be taught both practically and logically, thus promoting scientific investigation and mental discipline. It is not enough to find "answers," but the deductions must be based on established principles. First, the pupil performs the work in imitation of the teacher or author; then comparing facts learned, he reasons on the subject, consults the text and book of reference, makes the deduction, and applies the law to new cases. The power of original investigation and the faculty of invention are thus strengthened, and the student, by the inductive process of combining known principles and making new deductions, can anticipate the author in his demonstrations.

For admission into the Freshman class, the applicant must pass satisfactory examination in Arithmetic and in Algebra to Quadratic Equations.

It is desirable that all students should supply themselves with drawing instruments; for much attention is paid to original investigations, in which at least the dividers and protractor are essential.

## TEXT-BOOKS AND BOOKS OF REFERENCE.

*Algebra*.—Robinson's University, Wentworth's Complete, Wells's University.

*Geometry*.—Wentworth, Loomis, Welch and Chauvenet.

*Trigonometry*.—Schuyler, Wells and Wentworth.

*Analytical Geometry*.—Loomis and Todhunter.

*Calculus*.—Loomis, Church, Byerly and Williamson.

## ASTRONOMY.

A term is devoted principally to Descriptive Astronomy, together with as much Practical as possible in so short a period.

The subject is made interesting and profitable by the use of maps, globe, astral lantern, equatorial telescope, sextant and solar compass.

*Text and Reference Books*.—Olmstead's College Astronomy, Bowen's Astronomy of Observation, Newcomb and Holden's Astronomy, Coffin's Navigation and Nautical Astronomy, the Nautical Almanac, Loomis's Astronomy. Periodical—Siderial Messenger.

## LOGIC.

Logic is taught both from text-books and by lectures. Students are required to show its application in various scientific investigations. Essays from different authors are analyzed and discussed, with a view to the appreciation of sound reasoning and detection of fallacies. Original discourses are required of students to impress the principles taught. In this way a subject, ordinarily regarded as dry, is made of the liveliest interest.

*Text-books and Books of Reference*.—Jevon-Hill, McCosh, Mill and Hamilton.

DEPARTMENT OF  
HISTORY, ENGLISH AND MODERN LANGUAGES.

E. L. FLETCHER, PROFESSOR.

\_\_\_\_\_, ASSISTANT.

ENGLISH.

The work of the English course is assigned to the Freshman, Junior and Senior Classes.

For entrance into the Freshman Class, a full knowledge of Elementary Grammar, Composition and Analysis, is required, and the student is expected to be able to express himself with a fair degree of ease and clearness.

The work of the Freshman year is obligatory in all courses of study. It consists of two terms of Rhetoric. Every effort is made to render the course rich in practical results. To this end continuous graded exercises, or essays, promptly applying and drilling in the principles learned in the text-book, constitute a prominent feature thereof.

The Junior year of the course is obligatory only on the students of the B. A. course. It consists of two terms devoted to the study of the History of English Literature, together with original work on as many of the masterpieces of the language as the varying time will allow, and one term employed in the detailed consideration of Chaucer and Shakespeare.

The course in the Senior year consists of Anglo-Saxon, Middle English, and English Philology. The written exercises in the Junior and Senior years will consist of original investigation of questions connected with and forming a vital part of the class work. In this kind of work, the Library, containing as

it does, the masterpieces of our language from the earliest times down, is of invaluable assistance, and forms the main and most valued auxiliary of instruction. Students are referred, as far as possible, to the original sources, and taught to investigate for themselves.

*Text-Books.*—Clarke's Practical Rhetoric, Morris's, Historical English Grammar, Stopford Brooke's Primer of English Literature, Ward's English Poets, Sweet's Anglo-Saxon Reader, Morris's Specimens of Early English, Skeat's Principles of English Etymology.

#### HISTORY.

The work in History is done entirely in the Sophomore year. One term is devoted to each of the usual divisions of Universal History. While, by the use of a text-book, and a rapid course of lectures, the general flow of events throughout the world is followed, there is, besides, assigned to each student a specific period and region, which, during the year's time, he is required to work up thoroughly from original sources, as far as the material at hand will allow. The work of the student in the province assigned him is presented to the class in the form of an essay. Here again the Library, which is comparatively rich in historical works, is an invaluable auxiliary to the work of the course. The department is also provided with a number of accurate and beautiful maps.

The year's work in History is required in all courses except the Manual Training.

*Text-book.*—Fisher's Universal History.

#### GERMAN AND FRENCH.

In consequence of the legislative enactment which requires for any course containing a language other than English, the payment of a yearly tuition fee of \$10, the German and French languages have not been made obligatory in any of the courses; yet they are regarded by both the Board and the Faculty as essential parts of any Scientific course, and opportunity is given



the students of all courses to take them. Two years are assigned to each language. No entrance requirement is made. French is commenced in the Freshman year, and the work of the class is directed to the obtaining of a thorough familiarity with the forms of the language, and a large and practical vocabulary. At the end of the Freshman year the student is expected to be able to read ordinary prose at sight; and has all the material necessary to enable him, with facility and quickness, to learn to speak the language, if he so desire.

The Sophomore Class is engaged in reading and studying the classics of the language: the history of the language, the study of the syntax and idioms, and a hurried view of the historical grammar, complete the course.

German is begun in the Junior year, and the plan pursued is the same as that of the Freshman year in French. The Seniors complete the study of German, following the line of study pursued in French by the Sophomores. Daily practice in translating into French and German, and writing from dictation, form a prominent feature of class-work.

*Text-books.*—Whitney's French Grammar, Lectures on French Literature, Selections from Modern French Literature, Historical Grammar (Brachet), Harrison's Syntax, Selections from French Classics, German Grammar, (Joynes-Meissner), Lectures on German Literature, Grimm's Maerchen, Brandt's German Grammar, Selections from the German Classics.

N. B.—French and German weeklies are taken by the Library and are accessible to students. The current literature in English is also well represented. All three are made useful auxiliaries in the department.

## DEPARTMENT OF BIOLOGY AND GEOLOGY.

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PROFESSOR MCNEIL.

—, ASSISTANT.

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### BIOLOGY.

The course of instruction in the Biological Sciences includes Elementary Botany, Structural Botany, Physiological Botany, Elementary Physiology, General Physiology, General Zoology and original work in some department of Biology.

#### TEXT-BOOKS.

*In Botany.*—Gray's Series, Bessey's Botany.

*In Zoology.*—Colton's Practical Zoology, Packard's Zoology.

*In Physiology.*—Martin's Human Body.

### GEOLOGY.

The course of instruction in Geology includes Dynamical, Structural and Historical Geology, Survey Methods and Economic or Applied Geology. Field work is required of all students taking the General Course. The region adjacent to Fayetteville will be carefully studied and mapped, and that knowledge acquired which can only be attained by a personal and minute study of strata.

*Text-book.*—LeConte's Elements of Geology.

*Economic Geology.*—A course of lectures and recitations on this subject is especially arranged for Civil Engineering and Scientific students.

Frequent references are made to various works on Natural History and Geology contained in the University

Library, and the student in this department is expected to take advantage of the opportunity here offered to acquaint himself with the literature of the subject he may have under consideration.

The Lecture-room and Laboratory are situated on the third floor of the main University building, north end. The Laboratory is well equipped with new and costly microscopes, both dissecting and compound, and such other appliances as are necessary for carrying on Biological or Geological research.

### TABULAR STATEMENT.

CLASSES.	Terms	CLASS-ROOM WORK.	LABORATORY WORK—FIVE HOURS A WEEK.
SUB-FRESHMAN.	1	Elementary Botany.....	.....
	2	.....	.....
	3	Elementary Physiology.....	.....
FRESHMAN.	1	General Zoology.....	Systematic Zoology.
	2	General Zoology.....	Structural Zoology.
	3	Systematic Botany.....	Structural Botany.
SOPHOMORE.	1	Physiological Botany.....	Physiological Botany.
	2	Entomology.....	Systematic Entomology.
	3	General Physiology.....	Histology.
JUNIOR.	1	.....	.....
	2	Historical Geology.....	.....
	3	Economic Geology.....	.....
SENIOR.	1	Advanced Biology.....	Original Work.
	2	Advanced Biology.....	Original Work.
	3	Advanced Biology.....	Original Work.

## ANCIENT LANGUAGES.

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C. H. LEVERETT, PROFESSOR.

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The subjects taught in this department are the Latin Language and Literature and the History of Rome, the Greek Language and Literature and the History of Greece. Authors are read in the order of their difficulty, and neat written translations are required at stated intervals. The grammar and idioms of these languages are carefully studied and compared with those of English and other languages.

Marked attention is paid to the rendering of English into Latin and Greek. In the lower classes the best manuals for Latin and Greek composition are used; for the higher classes carefully graded exercises are prepared by the professor.

Due prominence is given to the study of Latin and Greek metres. The grammars are made the basis of this instruction, but fuller explanation is given in lectures.

For admission into the Freshman Class, students should be able to read at sight and parse any passage in two books of Cæsar; must know thoroughly all the declensions and conjugations, regular and irregular, of the Latin Grammar, and the elementary principles of Syntax; and should be able to translate easy sentences from English into Latin.

No Greek is required for admission.

### LATIN.

*Freshman Class.*—Gildersleeve's Grammar, Jones's Latin Prose Composition, Cæsar (Greenough or Kelsey) 2 Books, or Nepos (C. & S.) 35 pages, Virgil (Greenough) 3 Books of Æneid and selections from Eclogues, Pennell's or Smith's Smaller History of Rome.

*Sophomore Class.*—Gildersleeve's Grammar, Jones's Prose Composition, Cicero's Orations (Harkness) 50 pages, Odes of Horace (MacLeane), Livy (Lincoln) 50 pages.

*Junior Class.*—Gildersleeve's Grammar, Prose Composition, Livy 60 pages, Satires and Epistles of Horace (1500 lines), Tacitus (100 pages).

*Senior Class.*—Gildersleeve's Grammar, Original Exercises, Cicero's Moral Works, Juvenal (Leverett or MacLeane), Roman Literature.

*Books of Reference.*—Harper's Latin-English Lexicon, White's English-Latin Lexicon, Classical Dictionary, Classical Atlas, Zumpt's, Madvig's and Roby's Latin Grammars.

Other authors may occasionally be substituted for those above when a change seems beneficial: (*e. g.*) Sallust, Ovid, Catullus, Tibullus, Propertius, Pliny, Plautus.

## GREEK.

*Freshman Class.*—Goodwin's Grammar, Whiton's Lessons, Xenophon's Anabasis (Goodwin) 6 chapters.

*Sophomore Class.*—Goodwin's Grammar, Jones's Prose Composition, Xenophon's Anabasis 3 books, Lysias 3 orations, History of Greece.

*Junior Class.*—Goodwin's Grammar, Jones's Prose Composition, Herodotus (Mather) 40 pages, Homer's Iliad (Pratt and Leaf) 3 books, Demosthenes 40 pages, Plato.

*Senior Class.*—Goodwin's Grammar, Original Exercises, Thucydides 1 book, Euripides 1 play, Sophocles 2 plays, Greek Literature.

*Books of Reference.*—Liddell and Scott's Greek-English Lexicon, (7th Oxford Edition), Yonge's English-Greek Lexicon, Classical Dictionary, Classical Atlas, Goodwin's Moods and Tenses, Hadley's or Curtius's Grammar.

Other authors may be substituted for the above.



## NORMAL DEPARTMENT.

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PROFESSOR HOWELL.

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The design of this department is to train teachers for the schools of the state. Technical instruction is begun in the Sub-Freshman and completed in the Sophomore Class, satisfactory completion of the course entitling the student to a certificate of Licentiate of Instruction.

The course includes all the branches required for State license by the school laws of the State, and former graduates after successful experience in actual teaching for a reasonable time have been granted State license by the State Superintendent of Public Instruction without examination. After completing the Normal course, students may take up in the Junior class the work of one of the other courses and compete for the corresponding degree..

Psychology is made the basis of technical instruction, a brief outline of this branch being given in the Sub-Freshman Class, and special attention being paid to the analysis of the intellectual processes. Students are encouraged and trained to study their own mental phenomena, and to note evidences of similar phenomena, in the conduct of others, especially of children. The fundamental principles of teaching as deduced from psychical facts are presented as also general methods of teaching based on these principles. Students are required to give much attention to principles as inculcated, and to methods as illustrated in approved pedagogical books and journals, a good selection of which is free of access in the University Library. At the same time they are taught to avoid a slavish dependence upon the methods of others, and encouraged to devise methods of their

own. Methods of teaching the common branches are illustrated with the classes, the members being selected alternately to conduct recitations, and free criticism and discussion being allowed after each.

The idea is continually made prominent that character building should be the grand aim of the teacher. Near the end of the course a more extended outline of Psychology is given, covering the more important facts of the science with which a teacher should be familiar.

Further, the aims are:

1. To unify the work of our State educational system by bringing the secondary schools and the University into close sympathy with each other.

2. To teach pupils how to organize, grade and discipline the various kinds of schools.

3. To give them a knowledge of school law, and especially of the duties of teachers as officers of the State.

4. To impart to them a valuable summary of the history of education.

5. To aid them in creating for themselves high educational ideals, based on the principles of Christianity.

*Text-books.*—White's Pedagogy, Painter's History of Education, Baldwin's School Management, Palmer's Science of Education, Sully's Psychology.

## PREPARATORY DEPARTMENT.

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Students are not admitted into the "A" Preparatory Class until they are thoroughly familiar with the fundamental operations of Arithmetic including common fractions. In reading they must be able to understand and intelligently render specimens of the grade of the Fifth Reader; must have a knowledge of Elementary English Grammar, Elementary Geography, and the spelling of ordinary words of the grade of the Fifth Reader. Students failing to enter "A" class will be admitted to "B" class provided they show by examination ability to enter "A" class within one year.

Much importance is attached to Mental Arithmetic as a means for developing the power of analysis, and for strengthening the mind. Both oral and written exercises are required daily.

Daily exercises in Penmanship are required.

In the "A" Class Geography is taught during the first term, and United States History during the second and third terms. Latin is begun by those who propose a Classical course or the complete Normal course.

Classical students are thoroughly drilled in the elements of Latin Grammar, and are carried through a Reader and two books of Cæsar, or the equivalent, by the close of the Sub-Freshman year. Students are exercised by frequent translations from the English into Latin.

Algebra is taught during the entire Sub-Freshman year. Students are thoroughly drilled in the elementary principles, and required to master everything to equations of the second degree.

Elementary science is taught throughout the Sub-Freshman

year. The classes have been taught by the Professors of Chemistry and Biology, who have sought to give such an outline of scientific facts and principles as would prove valuable both to those students who propose to take a fuller course, and to the larger number who drop out of school before reaching the Collegiate Department.

TEXT-BOOKS.

*Algebra*.—Robinson's University.

*Arithmetic*.—Barnes's National.

*Book-keeping*.—Bryant and Stratton.

*English*.—Crittenden's Composition, Meiklejohn's English Language, Hyde's Practical Lessons in English.

*Geography*.—Appleton's Physical, Harper's School.

*History*.—Barnes's United States.

*Latin*.—Jones's First Lessons, Gildersleeve's Grammar and Reader.

*Penmanship*.—Harper's Copy Books.

*Physiology*.—Martin's Human Body (Elementary Course).

*Reading*.—Barnes and Swinton.

*Zoology*.—Holder's.

## MILITARY DEPARTMENT.

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PROFESSOR CABELL, U. S. A.

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The military officers of the University consist of the President, the Professor of Military Science and Tactics, and such assistant professors as may be assigned to duty in this department by the President. The President is head of the department, and issues, from time to time, such general and special orders as he deems necessary to the efficiency of the military exercises and to the enforcement of order in the buildings and on the grounds. One hour per week is devoted to theoretical instruction in the art and science of war.

This department is designed to impart to each male student, not physically incapacitated to bear arms, theoretical and practical instruction in the school of the soldier, of the company, and of the battalion, and thereby furnish the State with a body of young men qualified to organize its militia.

The male students are required to drill, because an act of Congress for 1862, which appropriated lands to establish the University, provided that the leading branches taught should be, in addition to the usual course of study prescribed in universities, "Military Science and Tactics".

Besides, the military drill is a superior health-giving exercise, and promotes physical development, manly carriage, neatness, precision, order and a habit of obedience, which is a valuable aid in the enforcement of discipline.

All male students not incapacitated for drill are assigned to companies, which are officered by cadets selected for proficiency



in drill, good deportment and scholarship. The cadet officers are regarded as assistants in the enforcement of discipline, and their orders, while on duty, are considered as duly authorized, and must be obeyed accordingly.

Cadet officers are expected and required to be examples in military deportment and general good conduct.

A neat uniform with brass buttons and suitable trimmings, is required to be worn at all drills.

Parents and guardians will save money by postponing the purchase of suits for their children and wards until they arrive at Fayetteville.

A competitive drill is held yearly and the successful company wins the honor of carrying the colors for the ensuing year.

## OFFICERS AND NON-COMMISSIONED OFFICERS OF THE BATTALION.

De R. C. CABELL (Second Lieut. 8th U. S. Cav.), Colonel.

C. C. PATTON, First Lieutenant and Adjutant.

EDWARD ILETT, Sergeant-Major.

A. W. SHREVE, Ordnance Sergeant.

### "A" COMPANY.

S. A. HORTON, Captain.

A. J. NEWMAN, First Lieutenant.

S. VAULX, Second Lieutenant.

W. McKIBBEN, First Sergeant.

J. S. PHARR, Sergeant.

C. F. ARMISTEAD, Sergeant.

W. I. BLACKWELL, Sergeant.

J. T. ROBINSON, Sergeant.

C. J. LEVERETT, Corporal.

J. E. WOODRUFF, Corporal.

### "B" COMPANY.

G. V. SKELTON, Captain.

H. B. SHREVE, First Lieutenant.

C. H. DRAKE, Second Lieutenant.

O. P. BREWER, First Sergeant.

J. B. ARMISTEAD, Sergeant.

A. C. WOOD, Sergeant.

S. C. TREADWELL, Sergeant.

W. M. FISHBACK, Sergeant.

F. F. HENRY, Corporal.

J. A. HARDIN, Corporal.

## MUSICAL DEPARTMENT.

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MRS. N. HOXIE PATTERSON, INSTRUCTOR.

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### PIANO FORTE.

Pupils completing this course are entitled to a Diploma.

#### FIRST GRADE.

New England Conservatory Method: Part 1—Doerner's Technical Exercises, Kohler's Studies Op. 50.

#### SECOND GRADE.

Duvernvy's Op. 120, Czerney's Etudes de la velvcite Op. 229, Selections from easy Sonatas (Peters Edition). Pupils are required to begin the study of Harmony in this grade.

*Text-book.*—Stephen Emory's Elements of Harmony.

#### THIRD GRADE.

Loeshorn's Op. 66, Czerney's Octave Studies, Heller's Introduction to Art of Phrasing, Harmony and selections from standard composers.

#### FOURTH GRADE.

Czerney's Op. 740; Heller's Art of Phrasing; Sonatas from Clementi, Mozart, and other selections from Classical Composition; Harmony.

#### FIFTH GRADE.

Cramer's Finishing Studies, (Von Bulow Ed.), and one year's study of the works of Beethoven, Bach, Liszt, Chopin etc. Richter's Harmony.

## VOCAL CULTURE.

### FIRST GRADE.

Art of breathing and of producing even and natural tones of voice. Bassini's Art of Vocalization.

### SECOND AND THIRD GRADES.

Pronunciation, Art of Phrasing, studies in Conconi and Marche, with other selections of moderate difficulty from the operas, etc.

### FOURTH AND FIFTH GRADES.

Studies of Panolka, Selections from standard composers, and one opera complete.

### TERMS.

Per session of twelve weeks—two lessons per week.

Piano Forte,.....	\$12.00
Voice Culture.....	12.50
Guitar.....	12.00
Thorough Bass and Harmony.....	5.00
Use of Piano one hour every day.....	2.35

For one lesson per week the rates are one-half the above, except for the use of piano.

Tuition payable in advance.

No deductions will be made on account of absence from recitations except in cases of prolonged sickness.

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## LOCATION.

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The Arkansas Industrial University is located within the corporate limits of the town of Fayetteville, Washington county. The location is thought to be unsurpassed by any other locality in the State in salubrity of climate, beauty of surrounding scenery, fertility of soil, variety and perfection of agricultural and horticultural productions, and in the morality and intelligence of its people.

## PROPERTY.

The property of the University consists of the proceeds of the munificent grant of land by Congress, the bonds of Washington county and of the town of Fayetteville, the appropriations made by the State, and the University farm lands—amounting in all to \$300,000 in value.

The Main Building is one of the most magnificent structures of the kind in the South. A brief description of it will be found on the third page of this catalogue.

## ACCESSIBILITY.

Students may reach Fayetteville from both the north and the south by double daily trains on the Texas branch of the St. Louis & San Francisco Railroad, which now connect on the south with the Little Rock & Fort Smith Railroad at Van Buren.

## ARRIVAL OF STUDENTS.

Students, on arriving at Fayetteville, must report at once to the President of the University. No student will be allowed to recite in any class until properly enrolled, but will be held responsible for his conduct from the time of his arrival in Fayetteville.

## WITHDRAWAL OF STUDENTS.

Parents or guardians who wish to withdraw their children or wards from the University should write to the President of the Faculty, stating their wishes. No honorable discharge will be given to a student under age who is unable to produce the written application of his parent or guardian for his withdrawal, or if his number of demerits shall exceed the proportion of two hundred allowed during the session. Nor will an honorable discharge be given to a student under censure of any kind, whether for neglect of duty or other cause, even though he may have the consent of his parent or guardian for his withdrawal from the University.

## BOARDING.

Students are required to board at such places as are approved

by the Faculty, and are under the supervision of the President of the University. No change of boarding house will be allowed, except at the end of the term, unless under extraordinary circumstances, nor without the permission of the President. In order to lighten the expenses of students of limited means, the State has provided a dormitory and dining-room on the University grounds. Here the students have excellent rooms free of rent, and obtain board at actual cost, which has been from seven to eight dollars per month. Occupants of the building must provide their own furniture, fuel and lights. Before entering the boarding house, they are required to promise to conform to such regulations as to study, the preservation of order, visiting, leaving their quarters, and the care of their rooms, as may be prescribed by proper authority.

An officer appointed by the Faculty lives in the building and superintends the department.

#### EXPENSES.

Matriculation, charged all new students.....	\$ 5 00
Tuition per session, charged all except beneficiary students.....	10 00
Tuition for one or more languages than English.....	10 00
(Ten dollars includes all tuition except music).	
Music Fees (see Music).	
Furniture for Dormitory students, at cost, usually about...	15 00
Board in Dormitory at cost, per month, from...\$ 7 00 to	8 00
Board in private families, per month, from.....	12 00 to 15 00
Uniform suit, purchased by student, from.....	13 00 to 17 50
Washing, per month, about.....	1 00

Students leaving the University frequently sell their furniture at a small reduction.

From the above statement, one may see that the actual charges made by the University are nominal, and board can be obtained at very reasonable rates.

#### LITERARY SOCIETIES.

In the Collegiate Department there are two literary societies, the "Mathetian" and the "Philomathean." Students who are



members of the Sub-Freshman Class are also eligible to membership in these.

Literary societies may be organized in the Preparatory Department under proper restrictions. At present there is but one in operation, the Garland Society.

#### LIBRARY AND READING ROOM.

A small but well-selected collection of books, numbering about 5,000 volumes, constitute the Library of the University. Of this number a large percentage is made up of valuable and costly technical works for the various departments of the Institution, and the necessary purchase of these has absorbed a large part of the yearly appropriations, and seriously retarded the numerical growth of the Library.

Yet in no sense has the purchase of a full collection of technical works been attempted in any department. The most that it has been possible to do has been to provide for the pressing needs of the hour by the thoughtful and careful expenditure of the small amount of money yearly assigned to each department. One of the most obvious and pressing necessities of the University to-day is a large and liberal appropriation from the Legislature, to provide a Library suitable to the needs of the Institution and the standing of the State. A complete technical library, kept up with the course of investigation and discovery by constant additions, has always been recognized by competent authorities as one of the most indispensable means and accessories of instruction even in the most practical schools. Agriculture and mechanics have their vital literature, their full line of necessary books of reference, just as much as have Chemistry and Engineering, or Physics and Astronomy, or Mathematics and English.

Moreover, History and *Belles-lettres* have their just and beneficent claims upon us. It is neither creditable nor pleasant to read in the report of the Commissioner of Education that Kansas, admitted to Statehood in 1861, contains libraries numbering in the aggregate 173,661 volumes, while Arkansas, admitted in 1836, can number in public

libraries throughout all the broad extent of her territory only 48,173 volumes. This is a bad showing for the reading propensities of our people, and the matter deserves careful consideration.

To remedy the matter, where can a better beginning be made than here at the State University, where the youth, coming up from all parts of the State, may learn, under careful and competent instructors, to value and to use a well-equipped library, and may carry home with them the desire to diffuse and strengthen in the various towns and villages the taste for more and better literature? Thus all through the State small libraries will spring up here and there, and taking root, will grow and produce for the State a hundred-fold harvest of thoughtful public spirit and intelligent patriotism.

Private philanthropy might be of much service in this matter, and probably would be so, if our needs were properly known. Any donation from private persons will be reported to the Board of Trustees and receive proper acknowledgment.

Besides the nuclei of technical libraries for the various departments, as already mentioned, we have a small but carefully selected collection of books on general literature. Additions to the library are made annually from a small fund set apart by the Board of Trustees.

Nearly all the newspapers of the State of Arkansas, and several from other States, have been generously furnished to the Library, either by the publishers or other friends of the University. The best magazines of America, and some from England, France and Germany, are also purchased. All these are kept on file in the Library, and students have access to them, as well as the books, at certain hours each day. No library fee is charged, but a deposit of \$2 is required to insure proper care of the books taken from the Library.

The thanks of all friends of the University are due to following persons for contributions of books:

## To Mr. Nathaniel Ruggles, Fayetteville, Ark., for

Malhan's Gazetteer (2 vols.), published 1797.  
 Morris's American Gazetteer (1 vol.), published 1797.  
 Sandwich Island Bible, published 1843.  
 American Encyclopædia (7 vols.), published 1805.  
 Ecclesiastical History, Maclaine (5 vols.), published 1811.  
 Life of Catharine II. (2 vols.), published 1802.  
 Universal Receipt Book, published 1825.  
 Humboldt's New Spain (2 vols.), published 1811.  
 Christian Observer, Vol. 14, published 1815.  
 Duffie's Nature Displayed, (2 vols.), published 1811.  
 History of Miranda (1 vol.), published 1810.  
 Fiji Island Bible (1 vol.), published 1850.  
 Pinkerton's Voyages (6 vols.), published 1810.  
 Principles of Natural and Revealed Religion, published 1816.  
 Russell's Ancient Europe (2 vols.), published 1801.  
 Marshall's Life of Washington (6 vols.), published 1804.  
 Novelist's Magazine (9 vols.), published 1781 to 1782.  
 Barretti's Dictionary of Spanish and English, published 1800.  
 Dictionary Royal of French and English, published 1729.  
 Monthly Anthology and Boston Review, Vol. 3, published 1806.  
 Athæneum, Vols. I and III, published 1817-18.  
 North American Review, Vols. 4, 18, 20, 21, 31, 32, 33 (20 vols.), published 1821-1831.

## To Mrs. B. F. Perry, of Sans Souci, S. C., for

Biographical Sketches of Eminent American Statesmen, by Gov. B. F. Perry, of South Carolina; Reminiscences of Public Men, by Gov. B. F. Perry.

## To Rev. Oliver Crane, for

Translation of Virgil's *Æneid*, by Rev. O. Crane.

## To Henry Shaw, St. Louis, Mo., for

Botanical Works of the late George Engleman, edited by Trealeace and Gray.

## To Prof. J. M. Whitham, Fayetteville, Ark., for

Steam Engine Design, by J. M. Whitham, A. I. U.

### APPARATUS.

The University is supplied with no inconsiderable amount of apparatus for illustrating the different sciences, and for the prosecution of original work. Most of the departments are well equipped for practical laboratory and field work.

### MUSEUM.

The cabinet of minerals consists chiefly of a collection of State minerals, contributed by various parties of the State, and by the professors; but it has been recently enlarged by purchase, and embraces also specimens of value from other States.

There has been constructed an herbarium case large

enough to hold the indigenous plants of North America and such exotics as are of economic value. It will be the work of years to complete a collection of the plants of North America, but the work is progressing; and the collection is large and valuable.

There are about 500 species of animals, illustrating the various parts of zoology.

Mr. C. W. Woodworth's donation of his collection furnishes us a nucleus for an entomological collection.

Collections in all the departments are slowly accumulating.

Contributions of minerals, fossils, Indian relics and rare curiosities are solicited.

#### APPOINTMENT OF BENEFICIARIES.

All appointments should be completed, if possible, before the opening of the Spring term. The County Judges, who make the appointments, should prepare duplicate notifications of appointments, one of which should be forwarded to the President of the University, and one to the Secretary of the Board of Trustees. In case the appointee fails to appear at the University within twenty days after an appointment (except in case of sickness), he or she will be regarded as having declined the appointment, in which case it will be the duty of the President of the Faculty to notify the person making the appointment of such failure, and he, in turn, should make another appointment as soon thereafter as possible. The President of the Faculty shall continue to notify appointing officers until their respective number of appointees make their appearance at the University.

All beneficiary students should be present at the opening of the Spring term; and unnecessary delay, either of old students returning, or new ones reporting, will lead to the forfeiture of their appointments.

#### QUALIFICATIONS.

The attention of County Judges is called to the fact

that no *Beneficiary Students* will be admitted unless they have the following qualifications:

Students are not admitted until they have become familiar with the fundamental principles of arithmetic, including common fractions. In reading, they must be able to understand and intelligently render specimens of the grade of the Fifth Reader, must have a knowledge of elementary English grammar, elementary geography, and the spelling of ordinary words of the grade of the Fifth Reader. These qualifications are the test of admission at the beginning of the session; those applying later will be admitted only on the grade of the class.

#### APPOINTMENTS.

As much trouble and annoyance is caused by students who have been appointed beneficiaries coming without any evidence of appointment, the following are adopted as the proper forms of notice to be given by the Judge of the County Court to the President of the University and the Secretary of the Board of Trustees, upon the appointment of beneficiary students by the County Court, or the Judge thereof, in accordance with the sixth section of an act approved March 6, 1875.

[Form 1—Appointment.]

No .....

[To be given to the Student.]

To whom it may concern:

I hereby appoint.....of.....  
County, State of Arkansas, as a beneficiary to the Arkansas Industrial University.

Given under my hand this.....day of.....189...

Send a notice like the following to the President of the University, and one to the Secretary of the Board of Trustees, at Fayetteville:

[Form 2—Notice to President of University.]

.....Arkansas. }  
..... }

To the.....University:

I hereby notify you that I have this day appointed.....  
.....of.....County, State of Arkansas,  
a beneficiary to the Arkansas Industrial University.

Given under my hand this.....day of.....189...



## BENEFICIARIES.

The Board of Trustees have provided that the number of beneficiaries shall be limited to one thousand, to be distributed to the counties of the State in proportion to the population of 1880, and that in every case where a county fails to supply its quota of beneficiaries, the Governor shall be authorized to appoint such beneficiaries to the full number authorized by law; provided that such appointment may be vacated on an application from a county so failing to fill its quota, but may be resupplied from some other county whose quota has not been filled. [See table.]

COUNTIES.	Beneficiaries.	COUNTIES.	Beneficiaries.
Arkansas.....	10	Lee.....	16
Ashley.....	13	Lincoln.....	12
Baxter.....	7	Little River.....	6
Benton.....	24	Logan.....	19
Boone.....	15	Lonoke.....	15
Bradley.....	8	Madison.....	15
Calhoun.....	7	Marion.....	10
Carroll.....	16	Miller.....	12
Chicot.....	12	Mississippi.....	9
Clay.....	13	Monroe.....	12
Clark.....	15	Montgomery.....	7
Cleburne.....	8	Nevada.....	17
Cleveland.....	10	Newton.....	6
Columbia.....	19	Ouachita.....	15
Conway.....	16	Perry.....	6
Craighead.....	8	Phillips.....	28
Crawford.....	11	Pike.....	3
Crittenden.....	11	Poinsett.....	7
Cross.....	6	P l k.....	3
Dallas.....	9	Pope.....	19
Desha.....	11	Prairie.....	10
Drew.....	15	Pulaski.....	45
Faulkner.....	17	Randolph.....	12
Franklin.....	18	Saline.....	11
Fulton.....	8	Scott.....	19
Garland.....	11	Searcy.....	7
Grant.....	8	Sebastian.....	28
Greene.....	9	Sevier.....	8
Hempstead.....	24	Sharp.....	12
Hot Spring.....	10	Stone.....	8
Howard.....	12	St. Francis.....	10
Independence.....	21	Union.....	16
Izard.....	14	Van Buren.....	11
Jackson.....	15	Washington.....	30
Jefferson.....	29	White.....	21
Johnson.....	15	Woodruff.....	12
Lafayette.....	6	Yell.....	18
Lawrence.....	10		

There is also one "Honorary Scholarship" to each county,

to be elected for superior merit and proficiency from the Public Schools of each county, according to section 2 of act July 23, 1868.

SALE OF ARDENT SPIRITS NEAR THE ARKANSAS INDUSTRIAL  
UNIVERSITY.

By an act of the General Assembly of the State of Arkansas, approved March 6, 1875, it is unlawful for any person to sell or give any vinous or ardent spirits within three miles of the Arkansas Industrial University, unless it be prescribed by a regular practicing physician for medicinal purposes.

Applications for catalogue or blanks for Beneficiary appointments should be addressed to Col. J. L. Cravens, Secretary, Fayetteville, Ark.

COMMENCEMENT.

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1890.

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1. *Saturday evening, November 29, 7:30 p. m.,*  
REHEARSAL OF ELOCUTION CLASS.
2. *Sunday, November 30, 11 a. m.,*  
BACCALAUREATE SERMON,  
BISHOP H. N. PIERCE, D. D., LL. D., Little Rock.
3. *Monday, December 1, 10:30 a. m.,*  
ADDRESS TO LITERARY SOCIETIES,  
COL. BEN T. DU VAL, of Ft. Smith.
4. *Monday evening, December 1, 7:30 p. m.,*  
GRAND CONCERT.
5. *Tuesday, December 2, 10:30 a. m.,*  
ALUMNI ADDRESS,  
JUDGE C. V. TEAGUE, of Hot Springs.
6. *Tuesday evening, December 2, 7:30 p. m.,*  
PHILOMATHEAN SOCIETY PROGRAMME.
7. *Wednesday, December 3, 3:00 p. m.,*  
BATTALION AND COMPETITIVE DRILLS.
8. *Wednesday evening, December 3, 7:30 p. m.,*  
MATHETIAN SOCIETY PROGRAMME.
9. *Thursday, December 4, 10:30 a. m.,*  
ANNUAL ADDRESS,  
HON. E. E. BRYANT, of Ft. Smith.  
CONFERRING OF DEGREES,  
GOVERNOR J. P. EAGLE.
10. *Thursday evening, December 4, 8 p. m.,*  
ALUMNI BANQUET.  
COMMENCEMENT BALL.

## CLASS OF 1890.

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### DEGREES CONFERRED.

The following students received the degrees affixed to their names :

TAFF, ALBERT G., B. C. E., 1ST HONOR,  
HUMPHREYS, GUSTAVUS A., 2D HONOR.  
GANNAWAY, JOHN R., B. A.  
HARVEY, F. L., PH. D.  
HERVEY, W. RHODES, B. S.  
MORROW, MATTIE M., B. S.  
WHEELER, JOHN N., B. A.

Certificates of Licentiate of Instruction were given to the following students :

GALLAWAY, IRENE.  
HOLCOMB, CENER.

The following honorary degrees were conferred :

JAY M. WHITHAM, M. E., C. E.  
HOWARD EDWARDS, LL. D.

## ALUMNI ANNOUNCEMENT.

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At a meeting of the Alumni Association, held December 2, 1890, the following officers were elected :

J. C. MASSIE, *President.*

J. F. MAYES, *Vice-President.*

NAOMI J. WILLIAMS, *Secretary.*

J. N. TILLMAN, *Treasurer.*

A motion was carried that the President of the Association select an orator to deliver the annual address next year.



## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY.

NAME.	RESIDENCE WHEN A STUDENT.	PRESENT RESIDENCE AND REMARKS.
	CLASS OF 1875.	
Botefuhr, Laura D.....	Fayetteville, Ark.....	Mrs. G. W. Schulte, Fort Smith, Ark.
Carson, Ann E.....	Jonesboro, Ark.....	Mrs. John Knight, Jonesboro, Ark.
Ca-son, Augusta O.....	Jonesboro, Ark.....	Mrs. T. W. Cline, Downey, Cal.
Davis, Lizzie P.....	Bentonville, Ark.....	Mrs. R. C. Brown, Florence, Arizona.
McCart, Eva.....	Fayetteville, Ark.....	Mrs. D. M. Main, Cheney, Kansas.
McKinney, Chas. F.....	Ozark, Ark.....	Traveling Salesman, Ozark, Ark.
Moore, Lucy J.....	Fayetteville, Ark.....	Mrs. Ross, Cincinnati, Ark.
Putnam, Anna.....	Fayetteville, Ark.....	Teacher in Public School, Fayetteville, Ark.
	CLASS OF 1876.	
Barnett, Nettie.....	Fayetteville, Ark.....	Mrs. C. Boles, Fayetteville, Ark.
Gorton, Bell L.....	Aurora, Ill.....	Author, Chicago, Ill.
Gregg, Alfred W.....	Fayetteville, Ark.....	Deceased.
Harris, Agnes.....	Fayetteville, Ark.....	Mrs. Johnson, Kansas City, Mo.
Harris, Sara E.....	Fayetteville, Ark.....	Professor in A. I. U. for several years—Mrs. C. Conrad, Kansas City, Mo.
Johnson, Albert P.....	Wesley, Ark.....	Lawyer, Winfield, Kansas.
Neal, W. H.....	Van Buren, Ark.....	Lawyer, Van Buren, Ark.
Taylor, E. L.....	Fayetteville, Ark.....	County and Probate Judge, Bentonville, Ark.
Waggoner, W. J.....	Farmington, Ark.....	Professor of Philosophy, University of Colorado, Boulder, Col.

## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	RESIDENCE WHEN A STUDENT.	PRESENT RESIDENCE AND REMARKS.
CLASS OF 1877.		
Borden, Alice .....	Fayetteville, Ark.....	Deceased.
Carden, E. B. ....	Bloomer, Ark.....	Physician, Mount Holly, Ark.
Hawkins, J. T. ....	Mount Holly, Ark.....	Fayetteville, Ark.
Jennings, Edgar P. ....	Fayetteville, Ark.....	Teacher in A. I. U., Fayetteville, Ark.
Massie, Collin .....	Fayetteville, Ark.....	Lawyer, Fort Smith, Ark.
Mellette, W. M. ....	Fort Smith, Ark.....	Deceased.
Simms, W. D. ....	Bentonville, Ark.....	Teacher in A. I. U., Fayetteville, Ark.
Waggener, Annie .....	Fayetteville, Ark.....	Lawyer, Fayetteville, Ark.
Walker, J. V. ....	Fayetteville, Ark.....	
Watson, Charles A. ....	Fayetteville, Ark.....	
CLASS OF 1878.		
Blakely, Nora .....	Fayetteville, Ark.....	Mrs. H. M. Hudgins, Hot Springs, Ark.
Gregg, Andrew S. ....	Fayetteville, Ark.....	Physician, Fayetteville, Ark.
Pettigrew, Thomas A. ....	Charleston, Ark.....	Lawyer, Charleston, Ark.
Reed, Maggie .....	Fayetteville, Ark.....	Mrs. P. A. Crawford, Fayetteville, Ark.
Sutton, Wm. S. ....	Fayetteville, Ark.....	Superintendent Public Schools, Houston, Texas.

## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	RESIDENCE WHEN A STUDENT.	PRESENT RESIDENCE AND REMARKS.
CLASS OF 1879.		
Butler, H. M.....	Varnor Station, Ark.....	Teacher, Waco, Texas.
Flord, J. C.....	Bentonville, Ark.....	Lawyer, Yellville, Ark.
Harrod, J. H.....	Austin, Ark.....	Lawyer, Little Rock, Ark.
Marrs, S. E.....	Viney Grove, Ark.....	Editor Democrat, Fayetteville.
Marshall, J. C.....	Avoca, Ark.....	Lawyer, Little Rock, Ark.
Patton, Alice.....	Viney Grove, Ark.....	Teacher in Public School, Fayetteville, A. k.
Teague, C. V.....	Toledo, Ark.....	County and Probate Judge, Hot Springs, Ark.
Wood, C. D.....	Hamburg, Ark.....	Judge Circuit Court, Monicello, Ark.
CLASS OF 1880.		
Droke, G. W.....	Bentonville, Ark.....	Teacher in A. I. U., Fayetteville, Ark.
Johnson, T. M.....	Wesley, Ark.....	Mrs. J. C. Belt, Brooken, I. T.
King, Artelle Alice.....	Fort Smith, Ark.....	County and Circuit Clerk, Paragould Ark.
Kitchens, T. B.....	Jonesboro, Ark.....	Merchant, Pine Bluff, Ark.
Langford, W. H.....	El Dorado, Ark.....	Teacher, Viney Grove, Ark.
Patton, Mattie J.....	Viney Grove, Ark.....	Lawyer, Fort Worth, Texas.
Ross, T. C.....	Fort Smith, Ark.....	Lawyer, Russellville, Ark.
Russell, Lawrence.....	Russellville, Ark.....	Lawyer, Fayetteville, Ark.
Thilman, J. N.....	Fayetteville, Ark.....	Teacher in A. I. U., Fayetteville, Ark.
Williams, Naomi J.....	Fayetteville, Ark.....	

# ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	RESIDENCE WHEN A STUDENT.	PRESENT RESIDENCE AND REMARKS.
CLASS OF 1881.		
Carnall, Ella.....	Fort Smith, Ark.....	Teacher in A. I. U. for several years—Fort Smith, Ark.
Ellis, F. W. ....	Fayetteville, Ark.....	United States Signal Service, Washington, D. C.
Moore, J. J.....	Vineyard, Ark.....	Lawyer, Helena, Ark.
Reed, Lina.....	Fayetteville, Ark.....	Teacher, Los Angeles, Cal.
Reiff, O. S.....	Magazine, Ark.....	Lawyer, Little Rock, Ark.
Watson, J. J.....	Fayetteville, Ark.....	Teacher in Australia.
CLASS OF 1882.		
Booth, W. P.....	Batesville, Ark.....	Farmer, Reyno, Ark.
Brown, W. D.....	Newtonia, Mo.....	Physician, Newtonia, Mo.
Carrigan, A. H.....	Washington, Ark.....	Lawyer, Throckmorton, Texas.
Chausler, C. K.....	Washburne, Mo.....	Lawyer, Grant's Pass, Oregon.
Cherry, W. R.....	Patterson's Bluff, Ark.....	County Clerk, Paris, Ark.
Gregg, L. W.....	Fayetteville, Ark.....	Lawyer, Fayetteville, Ark.
Hon, Daniel.....	Waldron, Ark.....	County Judge, Waldron, Ark.
Jones, Gustave.....	Jacksonport, Ark.....	Lawyer, Newport, Ark.
Lanier, J. A. M.....	Mountain Home, Ark.....	Principal Mountain Home Academy, Mountain Home, Ark.
McDonough, J. B.....	Bloomer, Ark.....	Prosecuting Attorney Twelfth Circuit, Fort Smith, Ark.
McFarlane, W. R.....	Enterprise, Ark.....	Lawyer, Greenwood, Ark.
Oats, T. F.....	Russellville, Ark.....	Physician, Mexia, Texas.
Pickel, J. W.....	Mulberry, Ark.....	Physician, Embree, Texas.
Rogers, P. A.....	Rocky Mount, La.....	.....
Shell, G. C.....	Augusta, Ark.....	Lawyer, Lake Village, Ark.

ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	RESIDENCE WHEN A STUDENT.	PRESENT RESIDENCE AND REMARKS.
<b>CLASS OF 1883.</b>		
Bates, C. O.....	Cincinnati, Ark.....	Professor, Coe College, Cedar Rapids, Iowa.
Cravens, Jesse.....	Fayetteville, Ark.....	Teacher in A. I. U., Fayetteville, Ark.
England, W. W.....	Evansville, Ark.....	.....
Greaves, C. D.....	Hot Springs, Ark.....	Lawyer, Hot Springs, Ark.
Mayes, J. F.....	Fayetteville, Ark.....	Merchant, Fayetteville, Ark.
Stroup, Henry.....	Webb City, Ark.....	Editor, Roseville, Ark.
Taliaferro, Lou.....	Bentonville, Ark.....	Stenographer, Seattle, Wash.
<b>CLASS OF 1884.</b>		
Anderson, L. S.....	Herndon, Ark.....	Clerk in Land Office, Washington, D. C.
Duncan, W. H.....	Conway, Ark.....	Lawyer, Conway, Ark.
Edmiston, W. L.....	Springfield, Mo.....	Teacher, Van Buren, Ark.
Gates, D. A.....	Tillar Station, Ark.....	Lawyer and Editor, Arkansas City, Ark.
Goodwin, W. P.....	El Dorado, Ark.....	Editor, El Dorado, Ark.
Hillis, E. W.....	Jonesboro, Ark.....	Lawyer, Jonesboro, Ark.
Hudson, J. H.....	Dardanelle, Ark.....	Teacher and Farmer, Dardanelle, Ark.
Lake, Ella.....	Viney Grove, Ark.....	Teacher of Music, Tahlequah, Indian Territory.
Reed, G. W. M., Jr.....	Fayetteville, Ark.....	Lawyer, Los Angeles, Cal.
Taff, J. L.....	Waldron, Ark.....	Principal Public School, Austin, Texas.



## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	RESIDENCE WHEN A STUDENT.	PRESENT RESIDENCE AND REMARKS.
	CLASS OF 1885.	
Hart, J. C.....	Dardanelle, Ark.....	Lawyer, Dardanelle, Ark.
Howell, J. W.....	Clarksville, Ark.....	Druggist, Little Rock, Ark.
Kinsworthy, E. B.....	Black Colony, Ark.....	Lawyer, Arkadelphia, Ark.
Notrebe, E. P.....	Sarassa, Ark.....	Physician, Boonville, Miss.
Woodall, W. H.....	El Paso, Ark.....	President Judson University, Judsonia, Ark.
Woolverton, C. D.....	Center Ridge, Ark.....	Principal Public School, Sheridan, Ark.
	CLASS OF 1886.	
Bates, J. H.....	Cincinnati, Ark.....	Lawyer, Corsicano, Texas.
Leverett, Mary.....	Fayetteville, Ark.....	Elocution Teacher, Fayetteville, Ark.
Middleton, Mai.....	Fayetteville, Ark.....	Mrs. Robert Chasteen, Russellville, Ark.
Mulholland, Sara.....	Fayetteville, Ark.....	Mrs. J. F. Mayes, Fayetteville, Ark.
Tillar, B. J.....	Tillar Station, Ark.....	Lawyer, Little Rock, Ark.

# ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Concluded.

NAME.	RESIDENCE WHEN A STUDENT.	PRESENT RESIDENCE AND REMARKS.
CLASS OF 1888.		
Bowles, Preston .....	Hancock, Md.....	Resident Engineer N. O., N. & Ft. S. R. R., Natchez, Miss.
Crozier, Wm. N.....	Fayetteville, Ark.....	Theological Student, Chicago, Ill.
Danaher, Mike.....	Little Rock, Ark.....	Law Student, Little Rock, Ark.
Dickson, W. E. ...	Magnolia, Ark.....	Teacher, Waldo, Ark.
Drake, N. F.....	Cincinnati, Ark.....	State Geological Survey, Austin, Texas.
Flynn, W. M.....	Fayetteville, Ark.....	Teacher, Oxford Bend, Ark.
Hobbs, Jno. H.....	Bentonville, Ark.....	Law Student, Washington and Lee University, Lexington, Va.
Pace, Ida.....	Harrison, Ark.....	Teacher, Jackson, Miss.
Polson, Alice.....	Fayetteville, Ark.....	Fayetteville, Ark.
Powell, W. W.....	Melbourne, Ark.....	Lawyer, Greenwood, Ark.
Schoff, Geo. C.....	Annapolis, Md.....	Adjunct Professor in A. I. U., Fayetteville, Ark.
Treadwell, Lee.....	Toledo, Ark.....	Assistant Engineer, Waddell & Jenkins, Kansas City, Mo.
Warren, Geo. A.....	Hazel Grove, Ark.....	Superintendent Public Schools, Fordyce, Ark.
CLASS OF 1889.		
Aiken, Don C. B.....	Fayetteville, Ark.....	Engineering Department, Johnson Co., Johnstown, Pa.
Fishback, L. F.....	Fort Smith, Ark.....	Loan Agent, Fort Smith, Ark.
Harrison, Grace.....	Washington, D. C.....	Fort Smith, Ark.
McNeeley, Jno. C.....	Rackensack, Ark.....	Assistant Engineer N. O., N. & Ft. S. R. R., Natchez, Miss.
Obenshain, Ora.....	Eureka Springs, Ark.....	Eureka Springs, Ark.
Slagle, Ida.....	Hico, Ark.....	Mrs. Gilbreath, Hico, Ark.
Taft, Mary.....	Fayetteville, Ark.....	Post Graduate Student, University of Texas, Austin, Texas.

### CALENDAR 1891.

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The First Term begins Monday, March 2, 1891.

The First Term ends Friday, May 29, 1891.

The Second Term begins Monday, June 1, 1891.

The Second Term ends Friday, Aug. 28, 1891.

The Third Term begins Monday, Aug. 31, 1891.

The Third Term ends Thursday, December 3, 1891.

The Commencement Thursday, December 3, 1891.

From the above it may be seen that the vacation will be in the winter. The arrangement affords students from malarial districts an excellent opportunity to spend the Summer at school in the mountains, and enjoy the Winter vacation at home without endangering their health.

# LAW DEPARTMENT.

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F. M. GOAR, LL. B., DEAN OF THE FACULTY.

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The Law course embraces two years. Spring Term will commence March 2d and close June 29. Fall Term will commence September 2d and close December 24, 1891.

A Special Term of two months during July and August, 1891, will be held for the benefit of those who may not be able to enter at the beginning of the Spring term, and such others as may desire to take a short special course.

*Course of Instruction.*—The design of this school is to afford such a training in the fundamental principles of the Law, as will constitute the best preparation for the practice of the profession anywhere in the United States, and especially in the State of Arkansas. With this view the course of study, which is intended to occupy the student two (2) years, will comprise the following subjects:

*Junior Year.*—Spring Term.—Contracts, Anson, Blackstone's Commentaries, Cooley's edition preferred. Agency, by lectures. Pleadings, Stephen.

Fall Term.—Evidence, Greenleaf, Vol. 1. Law of Corporations, Field. The organization and Jurisdiction of the Courts, State and Federal, by lectures. Torts, Cooley. Damages, by Lectures. Moot Court exercises.

*Senior Year.*—Spring Term.—Equity, Bispham. Equity Pleading, Lube and by lectures. Constitutional Law, Cooley. Law of Nations, lectures. Partnerships, Tyler and by Lectures. Evidence, Reynolds. Moot Court exercises.

Fall Term.—Tiedeman on Real Property. Criminal Law

and Criminal Procedure, Bishop, and by lectures. Bliss on Code Pleading. Statutes of Arkansas, Mansfield's Dig. and Acts subsequent thereto. Moot Court exercises.

For the spring term, 1891 *only*, students will be matriculated any time to May 1st, upon satisfactory examination, and charged for the unexpired term. Books can be purchased here.

We do not think it prudent for students to devote less than two years to the foregoing course. "He who is not a good lawyer when he comes to the bar, will seldom be one afterwards", is a saying full of truth. Thought as well as reading is necessary to the proper understanding of our system of jurisprudence. No man can hope to be a great lawyer by the cramming process. Whilst students are advised not to attempt to complete the full course in a single year, yet if anyone chooses to make the effort and has acquired a sufficient knowledge of the law by previous reading, he will be admitted to the graduating examination and if he attains the standard required he is entitled to the degree. Every candidate for the honor degrees will be required to attend the full term of two years.

*Expenses.*—Tuition, \$25 00 per Term, payable in advance. Books will cost from \$20 00 to \$30 00 per year. Board from \$8 to \$15 per month; by the club system, where students do their own work, from \$4 to \$6 per month.

Many reasons may be given why young men contemplating the practice of law in Arkansas should patronize their own law school. First, in the application of the elementary principles in the practice, the reference books must be in the main to the laws of the State where the Law School is located, as found in the constitution, statutes and supreme court reports of the State. Second, emulation and class organization will do much for the law student. The old way of serving a term in a private law office of a senior at the bar, is fast yielding to more modern and better methods. The best evidence of this is the fact that the most eminent lawyers at the bar send their sons to Law Schools. Again, the associations and friendships formed with representative young men throughout the State are invaluable in many respects to the practitioner.



*Prizes.*—As a further inducement to emulation among Students of the law, a complete set of the Reports of the Supreme Court of Arkansas will be presented to the first honor man. To the second honor man, the Digests of the Arkansas Reports, Digest of the Laws of Arkansas, and Acts of the Legislature subsequent thereto.

SPECIAL SUMMER COURSE OF LAW LECTURES—TO COMMENCE  
JULY 1, 1891, AND CONTINUE TWO MONTHS.

One of the objects of this special course is to give those who desire to take a law course here to enter an advanced class at the Fall Term upon examination on previous reading.

Two classes of persons will derive peculiar advantages by taking this course in addition to those above referred to.

1. Those who for want of time or means cannot attend a Law School and are hence compelled to pursue their studies privately. This two months' course will give a faithful student a better insight into our System of Jurisprudence than he would perhaps obtain in a whole year of private reading; and

2. Those who have just been admitted to the bar, and young practitioners who have not had the advantages of a Law School training. Such, and even those who have taken a full or partial course at Law Schools out of the State, will find this short course eminently serviceable, especially in familiarizing themselves with the the practice and pleading under the Statutes of the State and leading cases in our Supreme Court reports.

Moot Court exercises, involving questions passed upon in leading cases in our own State, and other States, will be a prominent feature of the course.

Junior Class—Contracts — Anson. Evidence — Reynolds. Pleading—Lectures. The organization and jurisdiction of the Courts, State and Federal—Lectures. For Reference, Ark. Dig. 1884. Moot Court exercises.

Advanced Class—Equity—Bispham. Equity Pleading—Lectures. Real Property—Tiedeman. Criminal Law—Lectures. Evidence—Reynolds. For Reference, Ark. Dig. 1884. Moot Court exercises.

The local bar at this place and quite a number of the leading Attorneys of this State have consented to deliver one or more lectures each, to the classes during the term.

Terms, \$20.00 for each class, or \$30.00 for both classes, in advance. Board and lodging from \$8.00 to \$12.00 per month.

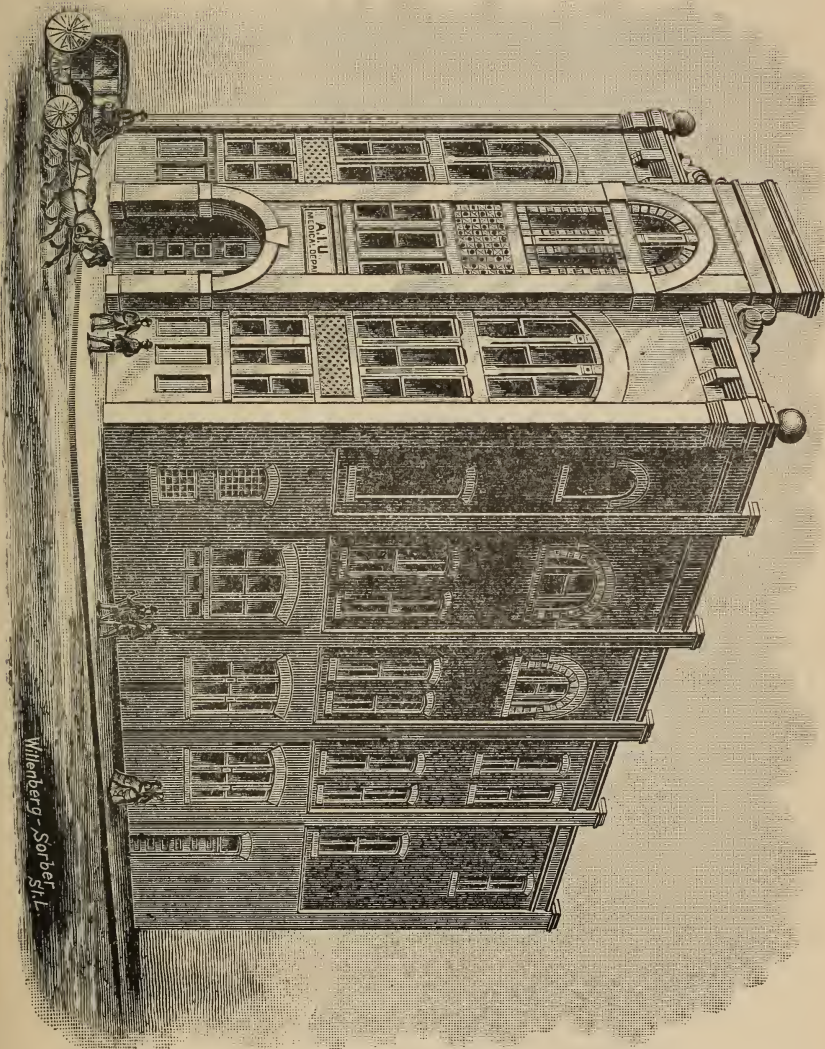
Law Faculty—Judge L. Gregg, Maj. B. B. Davidson, Hon. R. J. Wilson, J. V. Walker, A. M., and F. M. Goar, LL. B.

The Fall Term of the regular Law Course will begin September 2, 1891, for both Junior and Senior classes.

For further information address

F. M. GOAR,

*Dean of Law Faculty.*



## MEDICAL DEPARTMENT.

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The Board of Trustees of the Arkansas Industrial University, in the Spring of 1879, deemed it expedient to establish a *Medical Department*, to be located at Little Rock, the capital of the State. The organization was accordingly at once perfected, a full corps of professors secured, and the First Annual Announcement of a course of Medical Lectures, to commence October 7, 1879, was issued to the public.

Since this date an annual course of Medical Lectures, beginning early in October, and continuing five months, has been given at the Medical College building, situated on Second, between Main and Louisiana streets, Little Rock.

The growth of this branch has been gradual and natural, the first course of Lectures, or session of 1879 and 1880, having twenty-two matriculates, and one graduate, who had previously attended a course of lectures at another institution, or Medical College, while the Eleventh Course of Lectures, or Annual Session of 1889 and 1890 had seventy-eight matriculates and sixteen graduates, making the sum total of the eleven courses of lectures, or annual sessions, of five hundred and thirty-four (534) matriculates, and one hundred and twenty-five (125) graduates.

The old college building, situated on Second, between Louisiana and Main streets, which had served the purposes and necessity of the Faculty for eleven years, had become, through the growth of the institution, in the steady annual increase of its matriculates, inconvenient, and practically inadequate for future progress. Therefore, after the close of the course of lectures in the spring of 1890, the old structure was disposed of to the best practical advantage possible, and a new site selected on Second



and Sherman streets, and a new and convenient, as also imposing, structure erected, especially adapted to all the purposes and designs of a Medical College. This building is three stories high, constructed of brick and admirably arranged for the comfort and convenience of both students and instructors. It has a large, fine lecture hall, a splendid ampitheatre with chairs, a reading, museum, several private and elegant dissecting rooms, all well lighted and ventilated. In fact, it is a modern and model Medical College building, and cost upwards of \$15,000.

The Faculty are all men of acknowledged ability and standing in their profession, and have been untiring in their efforts to advance the interests of this department.

The College is well provided with the necessary charts, models, apparatus, etc., for illustrating each particular subject practically to the eye as to the ear of the student. The supply of dissecting material is ample and at a mere nominal cost, the State having made liberal provision in this particular.

The Clinical instruction in this institution is very extensive, embracing almost every disease known to prevail, and every class of accidents liable to occur. These clinics are always practical, and afford superior advantages to students and practitioners to obtain an ocular demonstration of diseases, accidents and their treatment.

The disposition of the old college building and the erection of a new one necessarily caused a postponement of the Twelfth Annual Course of Lectures to Wednesday, November 5, 1890. Prior to this year the Annual Course of Lectures has opened about the 2d of October, one month earlier than the present session began. Should this change of date of opening the College prove successful it is quite probable that, hereafter, it will be annually continued. In any event, the date of the commencement of the Thirteenth Annual Session will be publicly announced sufficiently and in time for all students desiring to attend to amply prepare themselves to do so.

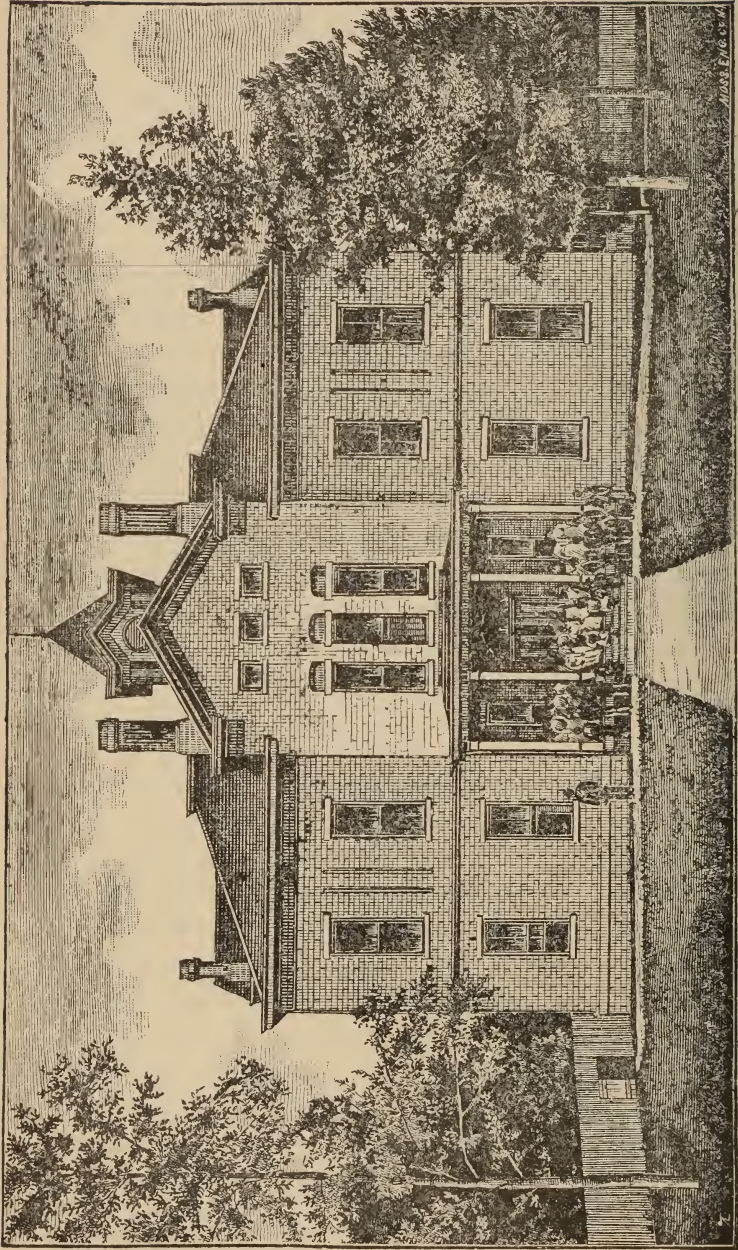
For Catalogue or special information apply to

R. J. JENNINGS, M. D.,

*Secretary of Faculty.*

Little Rock, Ark.





BRANCH NORMAL COLLEGE, PINE BLUFF, ARK.

## THE BRANCH NORMAL COLLEGE.

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### NUMBER OF STUDENTS 190.

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The Branch Normal College is a department of the Arkansas Industrial University, established pursuant to an Act of the General Assembly of the State of Arkansas, approved April 25, 1873, and has been in operation since September 27, 1875. Its primary object is the training of teachers for efficient service in the colored public schools of the State—the law referred to having been enacted with special reference to the “convenience of the poorer classes.” For the purpose of carrying out the intent of the law, by enabling those who wish to avail themselves of its advantages, there is no charge for tuition for appointees; the only requirements for admission being suitable age and qualifications, an appointment from one of the County Judges, and the payment of the entrance fee of five dollars.

#### LOCATION, ETC.

The school property consists of a beautiful tract of twenty acres of ground, in the suburbs of Pine Bluff, Jefferson county, Arkansas, and a few rods from the junction of the Little Rock, Mississippi River & Texas and “Paramore” Railroads. The school building, completed in 1881, and occupied January 30, 1882, is one of the handsomest educational edifices in the State, as well as one of the best, being warm and comfortable, well lighted and ventilated. It contains one large assembly room, four recitation rooms, and cloak rooms for males and females. The building is of brick, with slate roof and trimmings of Alabama granite,

and cost, with improvements and furniture, \$12,000. The furniture and other equipments are of the best modern style.

The Normal Course of Study is not what goes by that name in many of our institutions; that is, a mere preparation for teaching the common branches, but differs from the usual college curriculum merely in the omission of one or two branches of higher mathematics, and having less in Greek.

The first two years of this course are intended to rank as the Freshman and Sophomore years of the usual college curriculum, and the last two years as the equivalent of the Junior and Senior years.

Eight classes have graduated in the institution, and, as will be seen in the list of the Alumni, are now occupying prominent positions in life.

Recently the entire building has been whitened, painted and repaired; new furniture and some new apparatus purchased.

The Reading Room has been fitted up in elegant style and an excellent beginning made toward securing a good library by the collection of about one thousand volumes. It has been supplied with quite a number of valuable newspapers and periodicals, many of which were furnished by their publishers. Among those on file were the Freeman, Indianapolis; Western Appeal, Minneapolis; Gazette, Huntsville; the Gazette, Little Rock; Globe-Democrat and Republic, St. Louis; The Tyler, Detroit, Mich.; Popular Educator, Boston; Lippencott's Educational Quarterly; American Student, New York; Board of Education, Chicago; School Journal, New York; Weekly Echo, Pine Bluff; National Baptist, Philadelphia; Southern Review, Helena, etc.

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## THE LIBRARY.

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The Library consists of over one thousand five hundred volumes, embracing many valuable reference books, such as Appleton's Cyclopædia, Lippencott's Gazetteer, etc. It also has



acquired by purchase during the last year a fine collection of the works of standard authors, Shakespeare, Milton, Irving, Cooper Dickens, Longfellow, Carlyle, Tennyson. The library of the Principal, embracing many valuable text and reference books, including the Encyclopædia Britannica, is also accessible to students. A small collection of minerals, each of which is a typical specimen, and none of which are duplicates, has been procured. During the coming year a valuable supply of apparatus will be added to the educational resources of the institution.

### THE DORMITORY.



FEMALE DORMITORY AND BOARDING HOUSE OF BRANCH NORMAL  
COLLEGE.

During the past year the commodious brick dormitory appropriated to the use of female students was occupied under the supervision of the Principal and wife. Quite a number of female students was accommodated with rooms and board at two dollars per week, payable in advance. These boarders are required to attend to their own rooms, and assist in turn in attending to the table. They are also expected to furnish their own bed linen.

In addition to the regular class exercises laid down in the curriculum of study, there are regular lessons in vocal music

which are open to all the students. There are also facilities given for instruction upon the piano, organ, guitar, and other instruments.

The meetings of the Normal Choir and Normal Orchestra afford excellent opportunities for practice in both vocal and instrumental music.

The length of the vacation allows the advanced students an opportunity to engage in teaching, and a large proportion of their number have done so during the past five years. In nearly all cases they have given good satisfaction, and conduct their schools with a fair degree of success. The Normal students have also assisted in the work of the institution itself as a part of their training.

As a part of their training, the advanced students of the Institution assist in the work of teaching.

It will be a great advantage to the Institution if the various County Judges will take a special interest in seeing that their counties are represented. The proper blanks for making appointments will be furnished, together with all necessary information, on application to the Principal.

J. C. CORBIN, A. M.,

*Pine Bluff, Arkansas.*

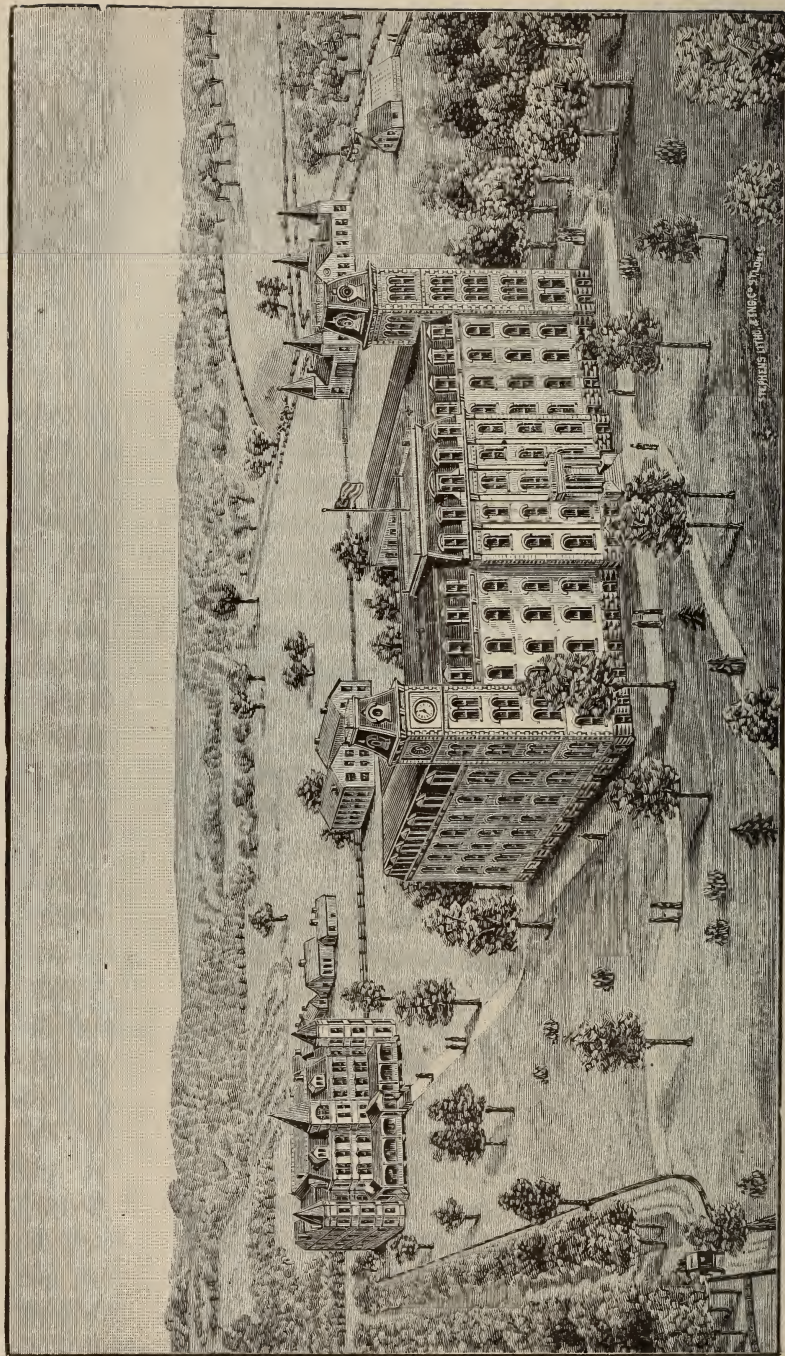


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ST. PHILIP'S CHURCH, N.Y.

—Nineteenth Catalogue—

OF

The Arkansas

Industrial University

Fayetteville, Washington County, Ark.

FOR THE

Year Ending December 3, 1891,

AND

Announcement for 1892.

---

Little Rock, Ark.:  
The Press Printing Company.  
1892.





# UNIVERSITY BUILDING.

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The main University building (see frontispiece) is a magnificent structure of brick, four stories in height, with a stone basement and mansard roof. It occupies three sides of a quadrangle, and has a frontage of 214 feet.

In the north wing are situated the Chapel on the first floor, the Library on the second, and the Engineering Drawing Room on the third; in the south wing, the High School Hall for boys on the first floor, High School Hall for girls on the second.

The main front of the building is divided into offices, recitation rooms and laboratories. The offices of the President and the Commandant, and the rooms of the Preparatory and Musical Departments are on the first floor, the Departments of Mathematics, Engineering and Physics, Ancient and Modern Languages and Pedagogics have convenient rooms on the second floor, while the Departments of Agriculture and Chemistry, and Biology, Geology and Engineering are accommodated on the third floor. Above, on the fourth floor, are the commodious and well-furnished halls of the literary societies and the Museum.

This building covers an area of 26,108 square feet, and contains *seventy* rooms, together with broad corridors and ample stairways. As a safeguard against fire, and to insure uniform temperature, the entire building is heated throughout by steam.

The new Dormitory (see page 34), in accordance with legislative enactment, was erected by the Board of Trustees in 1887, and opened to the use of students in the Spring of 1888.

It is a substantial brick building three stories high, containing over forty rooms. In finish and appearance, both externally and internally, it is a model structure. The rooms are large, airy, well ventilated and lighted, and open into broad corridors extending lengthwise through the building. The entrances are five in number; three in front, which open upon a broad veranda, and two in the rear. As to location, every precaution has been taken to insure good health to its occupants. That proper care may be exercised, a member of the teaching body resides here with his family, and the University Faculty make a regular tour of inspection.

The building of the Agricultural Experiment Station is of brick, one story in height. It contains the office of the Director, the apartments of the Chemist, Horticulturist, Veterinarian and Entomologist, together with a commodious Chemical Laboratory, Weighing-Room, Microscope-Room and Store-Rooms.

The new Shop Building was erected in the Spring of 1889. It is of corrugated iron, 170 feet long, 40 feet wide and one story in height, with ample light and ventilation. The Wood-Room is 40x60 feet in size, the Metal-Room 40x40 feet, the Forge-Room 40x25 feet, and the Foundry 40x45 feet.

Connected with the Department of Agriculture are a large barn, stock shed, dairy house, fruit house and other necessary outbuildings.

# ANNOUNCEMENTS FOR 1891-2

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1891.

September 1.—First term begins in the Branch Normal College at Pine Bluff.

November 4.—The session of the Medical Department at Little Rock begins.

November 29.—First term ends in the Branch Normal.

December 1.—Second term begins in the Branch Normal.

1892.

March 1.—First term begins in all of the Departments of the University at Fayetteville.

March 2.—Second term ends in the Branch Normal.

March 5.—Third term begins in the Branch Normal.

April 6.—The session of the Medical Department at Little Rock ends.

May 27.—First term ends in all of the Departments of the University at Fayetteville.

May 30.—Second term begins in all of the Departments at Fayetteville.

June 7.—Third term ends in the Branch Normal.

August 26.—Second term ends in all of the Departments at Fayetteville.

August 29.—Third term begins in all of the Departments at Fayetteville.

November 27.—Baccalaureate sermon.

December 1.—Commencement in all of the Departments of the University at Fayetteville.

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Batesville.  
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Little Rock.  
R. G. JENNINGS, M. D.,  
Little Rock.

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Professor of Mathematics, Logic and Astronomy.

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R. H. WILLIS, A. M.,  
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Professor of Military Science and Tactics.

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Adjunct Professor of Geology.

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Adjunct Professor of Mathematics.

HAROLD B. SMITH, M. E.,  
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First Assistant in the High School.

MARY E. WASHINGTON,  
Assistant in the High School.

ANNA MARTHA WAGGENER, B. L.,  
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G. H. STRANGE, T. L. DAVIS,  
Assistants in the Library.

PROFESSOR KERR,  
Secretary of the University Faculty, Fayetteville, Ark.

PROFESSOR MEEK,  
Curator of the Museum.

BLANCHE BIBB,  
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Foreman of the Farm.

J. M. MOORE,  
Assistant Foreman of the Farm.

PROFESSOR MASSIE.  
Superintendent of Dormitories.

WILLARD FRENCH,  
Engineer.

GEORGE KLEIN,  
Janitor.

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P. O. HOOPER, M. D.,  
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Professor of Gynecology.

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Professor of Institutes of Medicine.

W. H. MILLER, M. D.,  
Prosector of Anatomy.

E. E. MOSS, A. M., LL. B.  
Professor Medical Jurisprudence.

F. H. CLARKE,  
U. S. Weather Bureau, Meteorology.

SAM PRIOR,  
Janitor at the Medical College.

R. G. JENNINGS, M. D.,  
Secretary of Medical Faculty, Little Rock, Ark.

# THE AGRICULTURAL EXPERIMENT STATION.

---

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Director of the Station.

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JOHN T. STINSON.....	Horticulturist
F. W. KILLEN.....	Assistant Chemist
GEO. B. IRBY.....	Assistant Agriculturist at Newport
B. M. BAKER.....	Assistant Agriculturist at Pine Bluff

# CATALOGUE OF STUDENTS

ABBREVIATIONS.—Ph. D., Doctor of Philosophy; B. A., Bachelor of Arts; C. E., Civil Engineering; M. E., Mechanical Engineering; B. S., Bachelor of Science; B. S. A., Bachelor of Scientific Agriculture; L. I., Licentiate of Instruction; Ir., Irregular.

SESSION 1891.

## COLLEGIATE DEPARTMENT.

### POST GRADUATES.

NAME.	RESIDENCE.	COURSE.
George W. Droke, A. M.	Fayetteville, Ark.	Ph. D.
J. Collin Massie, A. B.	Fayetteville, Ark.	Ph. D.
Ida Pace, A. B.	Harrison, Ark.	Ph. D.
Anna M. Waggener, B. L.	Fayetteville, Ark.	Ph. D.
Naomi J. Williams, A. M.	Fayetteville, Ark.	Ph. D.
Total		5

### SENIORS.

NAME.	RESIDENCE.	COURSE.
Drake, C. H.	Cincinnati, Washington county.	C. E.
Goodwin, Wm. S.	Warren, Bradley county.	B. A.
Horton, S. A.	Fairview, Dallas county.	B. A.
Humphreys, J.	Fort Smith, Sebastian county.	Ir.
Martin, Mack.	Hackett City, Sebastian county.	M. E.
Newman, A. J.	Lonoke, Lonoke county.	B. A.
Patton, C. C.	Fayetteville, Washington county.	B. A.
Shreve, A. W.	Farmington, Washington county.	C. E.
Shreve, H. B.	Farmington, Washington county.	C. E.
Skelton, G. V.	Fayetteville, Washington county.	C. E.
Total number of pupils in Senior Class.		10

### JUNIOR CLASS.

NAME.	RESIDENCE.	COURSE.
Arbuckle, J. D.	Charleston, Franklin county.	B. A.
Black, J. W.	Franklin, Izard county.	B. A.
Blackwell, W. I.	Perryville, Perry county.	C. E.
Curry, Lula.	Fayetteville, Washington county.	B. S.
Hamilton, W. J.	Hartford, Sebastian county.	B. A.
Holcomb, Cener.	Fayetteville, Washington county.	B. A.
Kimball, G. H.	Dardanelle, Yell county.	C. E.
Pharr, J. S.	La Grange, Lee county.	B. A.
Vaulx, Julia.	Fayetteville, Washington county.	B. A.
Vaulx, Samuel.	Fayetteville, Washington county.	B. A.
Wood, A. C.	Fayetteville, Washington county.	M. E.
Wood, B. F.	Fayetteville, Washington county.	M. E.
Total number of pupils in Junior Class.		12

## SOPHOMORE CLASS.

NAME	RESIDENCE.	COURSE.
Armistead, C. F.	Charleston, Franklin county	B. A.
Ash, L. R.	Fayetteville, Washington county	C. E.
Bibb, Blanche	Franklin, Kentucky	B. A.
Braly, E. H.	Fayetteville, Washington county	B. A.
Brewer, O. P.	Webber's Falls, Indian Territory	B. S.
Crawford, W. A.	Boonsboro, Washington county	B. A.
Davies, Hodge	Fayetteville, Washington county	B. A.
Ellis, Mark	Springdale, Washington county	B. A.
Evins, Adah	Boonsboro, Washington county	L. I.
Green, Frank	Harrison, Boone county	B. S.
Gates, H.	Springfield, Mo.	L. I.
Hall, Ed. C.	Dardanelle, Yell county	C. E.
Harris, Rena	Fayetteville, Washington county	B. S.
Hedrick, I. G.	Boonsboro, Washington county	C. E.
Holcomb, Bruce	Fayetteville, Washington county	B. S.
Hughes, G. A.	Osage Mills, Benton county	C. E.
Ilett, Edward	Fort Smith, Sebastian county	C. E.
Killen, F. W.	Fayetteville, Washington county	Ir.
Martin, Pearl	Fayetteville, Washington county	B. S.
Moore, J. F.	Fayetteville, Washington county	B. S.
Moore, J. H.	Fayetteville, Washington county	B. S.
Morrow, S. Y.	Fayetteville, Washington county	B. S. A.
Pharr, Harry	La Grange, Lee County	C. E.
Rawlings, J. O.	Waldron, Scott county	B. S.
Smith, Ernest	Charleston, Franklin county	C. E.
Vance, A. M.	Pierce City, Mo.	C. E.
Vandeaver, James	Fayetteville, Washington county	B. S.
Vandeenter, Willie	Fayetteville, Washington county	B. S.
Total number of pupils in Sophomore Class		28

## FRESHMAN CLASS.

NAME.	RESIDENCE.	COURSE.
Barr, Ida	Fayetteville, Washington county	B. S.
Basden, John H.	Hope, Hempstead county	L. I.
Braly, Etta	Fayetteville, Washington county	B. S.
Brandon, W. E.	Huntington, Sebastian county	C. E.
Brookfield, Ben	Fayetteville, Washington county	C. E.
Brooks, Minnie	Fayetteville, Washington county	B. S.
Curry, Lizzie	Fayetteville, Washington county	L. I.
Dyer, Mallie	Prairie Grove, Washington county	L. I.
Eld, C. J.	Bentonville, Benton county	—
Evins, A. W.	Boonsboro, Washington county	C. E.
Ferguson, Gussie	Fayetteville, Washington county	B. S.
Futrell, J. M.	Fayetteville, Washington county	B. A.
Gibson, J. E.	Malvern, Hot Spring county	M. E.
Gideon, D. C.	Cotton Plant, Monroe county	B. S.
Glover, O. L.	Viney Grove, Washington county	B. A.
Godfrey, J. H.	Pine Bluff, Jefferson county	B. A.
Groves, F. M.	Waldo, Columbia county	B. A.
Head, J. D.	Richmond, Little River county	B. A.
Hedrick, Otis	Robinson, Benton county	B. S.
Howerton, C. T.	Fayetteville, Washington county	B. S.
Humphry, C. A.	Fort Smith, Sebastian county	B. A.



NAME.	RESIDENCE.	COURSE.
Hust, R. ....	Bentonville, Benton county .....	B. S.
Hust, H. ....	Bentonville, Benton county .....	B. A.
James, Aggie .....	Fayetteville, Washington county .....	B. S.
Kerr, E. W. ....	Pittsburg, Pennsylvania .....	C. E.
Lane, J. R. ....	Dallas, Pope county .....	B. A.
Lawrence, R. L. ....	Appleton, Pope county .....	B. S. A.
Leverett, Charles .....	Fayetteville, Washington county .....	B. S. A.
Leverett, Abbie .....	Fayetteville, Washington county .....	B. A.
Lipsey, Dan B. ....	Fayetteville, Washington county .....	B. A.
Martin, J. R. ....	Warren, Bradley county .....	B. S.
Martin W. Howard .....	Hackett City, Sebastian county .....	B. S.
McDearmon, B. C. ....	Batesville, Independence county .....	B. A.
McMullin, R. D. ....	Centerville, Yell county .....	B. S.
Morley, May .....	Fayetteville, Washington county .....	B. S.
Morrow, Fred R. ....	Fayetteville, Washington county .....	C. E.
Moulden, J. P. ....	Plano, Collin county, Texas .....	M. E.
Nash, John D. ....	Waldo, Columbia county .....	B. A.
Neal, W. J. ....	Van Buren, Crawford county .....	L. I.
Owens, Phoebe .....	Fayetteville, Washington county .....	B. S.
Pittman, R. ....	Fayetteville, Washington county .....	B. S.
Purdy, J. C. ....	Lake Providence, La. ....	M. E.
Purdy, S. M. ....	Lake Providence, La. ....	C. E.
Robinson, J. F. ....	Lonoke, Lonoke county .....	B. S.
Rosser, Alta .....	Evansville, Washington county .....	L. I.
Russell, Chester .....	Russellville, Pope county .....	B. A.
Rutherford, H. H. ....	Fort Smith, Sebastian county .....	B. A.
Slagle, Guy .....	Hico, Benton county .....	C. E.
Speer, George H. ....	Cedar Glades, Montgomery county .....	B. A.
Stearnes, Mattie .....	Fayetteville, Washington county .....	L. I.
Taff, S. M. ....	Fayetteville, Washington county .....	C. E.
Treadwell, S. C. ....	Fayetteville, Washington county .....	L. I.
Trott, E. W. ....	Fayetteville, Washington county .....	B. S.
Vaughan, George .....	Lockesburg, Sevier county .....	B. S.
Vaulx, Madge .....	Fayetteville, Washington county .....	B. A.
Wade, Lena .....	Fayetteville, Washington county .....	L. I.
White, Lula .....	Fayetteville, Washington county .....	B. S.
Williams, Matie .....	Fayetteville, Washington county .....	L. I.
Wilson, Nellie .....	Fayetteville, Washington county .....	B. S.
Wood, Christian .....	Buckner, Columbia county .....	L. I.
Total number of pupils in Freshman Class .....		60

### SUB-FRESHMAN CLASS.

NAME.	RESIDENCE.	COURSE.
Allen, Edna .....	Farmington, Washington county .....	B. S.
Ambrose, C. D. ....	Fayetteville, Washington county .....	B. S.
Ash, W. D. ....	Fayetteville, Washington county .....	C. E.
Baker, E. N. ....	Witcherville, Sebastian county .....	B. S.
Barnett, Carl .....	Fayetteville, Washington county .....	C. E.
Barr, Frank .....	Fayetteville, Washington county .....	B. S. A.
Bates, C. D. ....	Van Buren, Crawford county .....	B. A.
Beattie, Mary .....	Fayetteville, Washington county .....	B. A.
Bell, John .....	Pontotoc, Miss .....	B. A.
Benbrook, Agnes .....	Fayetteville, Washington county .....	B. S.
Benton, J. L. ....	Fayetteville, Washington county .....	B. S. A.

NAME.	RESIDENCE.	COURSE.
Black, W. M	Fort Smith, Sebastian county	B. S.
Boyd, Robert	Paragould, Greene county	L. I.
Braly, Amanda	Fayetteville, Washington county	B. S.
Brant, Henry	Appleton, Pope county	B. S. A.
Broyles, Ida	Fayetteville, Washington county	B. S.
Butts, John	Prairie View, Logan county	B. S. A.
Cabell, May	Fort Smith, Sebastian county	B. S.
Chauncey, A. H.	Cecil, Franklin county	B. A.
Childers, C. C.	Imboden, Lawrence county	B. S.
Clark, D. S.	Marianna, Lee county	B. A.
Clark, Charles	Waldo, Columbia county	—
Cornelius, Rose	Van Buren, Crawford county	L. I.
Counterman, R. M.	Dayton, Sebastian county	B. S. A.
Cole, Kate	Fayetteville, Washington county	B. S.
Crawford, Maude	Fayetteville, Washington county	B. S.
Cravens, H.	Fayetteville, Washington county	B. A.
Crozier, A.	Fayetteville, Washington county	C. E.
Crozier, J. P.	Fayetteville, Washington county	M. E.
Daniel, J. M.	Laneburg, Nevada county	B. S.
Davies, Lila	Fayetteville, Washington county	B. A.
Davis, F. L.	Greenway, Clay county	B. A.
Dowell, F.	Fayetteville, Washington county	B. S. A.
Evens, F. P.	Fayetteville, Washington county	M. E.
Frazier, J.	Fayetteville, Washington county	C. E.
Galloway, E.	Fayetteville, Washington county	C. E.
Grandy W. P.	Monticello, Drew county	B. S.
Griffith, Kate	Fayetteville, Washington county	B. S.
Grother, Mary	Fayetteville, Washington county	B. S.
Gunter, Gertie	Fayetteville, Washington county	B. S.
Hackett, J. F.	Hackett City, Sebastian county	B. S.
Hale, Irvin	Fayetteville, Washington county	M. E.
Hale, J. F.	Springdale, Washington county	L. I.
Halley, H. H.	Halley, Desha county	B. S.
Hardin, Lena	Fayetteville, Washington county	L. I.
Hardin, Nina	Fayetteville, Washington county	L. I.
Hardin, J. L.	Fayetteville, Washington county	C. E.
Harper, W. B.	Mansfield, Sebastian county	C. E.
Harris, Alice	Fayetteville, Washington county	B. S.
Harris, Julia	Whitney, Texas	L. I.
Hayes, C. E.	Clarksville, Johnson county	B. S.
Henderson, A. A.	Osage Mills, Benton county	B. S.
Hilderbrand, H.	Crawfordsville, Crittenden county	C. E.
Hollis, Carl.	Orlando, Cleveland county	B. S.
Howell, W.	Fayetteville, Washington county	M. E.
Hudspeth, J. L.	Hamburg, Ashley county	B. A.
Hughes, Mary	Osage Mills, Benton county	B. S.
Jackson, Oza	Fayetteville, Washington county	B. S.
Jackson, Lewis	Fayetteville, Washington county	B. A.
Jackson, Willie	Fayetteville, Washington county	B. S.
Jackson, Hugh	Fayetteville, Washington county	B. S.
Jones, Arthur.	Amity, Clark county	B. A.
Jones, Alice	Forrest City, St. Francis county	B. S.
Knight, H. L.	Huntsville, Madison county	B. S.
Lee, Carrie	Fayetteville, Washington county	B. S.

NAME.	RESIDENCE.	COURSE.
Lee, Eva .....	Fayetteville, Washington county.....	B. A.
Lewis, L. L. ....	Fayetteville, Washington county.....	B. A.
Love, R. C. ....	Mountain Home, Baxter county.....	B. A.
Love, B. F. ....	Mountain Home, Baxter county.....	B. A.
Lowery, E. C. ....	Huntsville, Madison county.....	B. S.
Lloyd, Byron .....	Oak Forrest, Lee county .....	B. A.
Martin, Perry .....	Lowell, Benton county .....	B. S.
McBride, Mamie .....	Boonsboro, Washington county.....	B. S.
McClure, Trudie.....	Buckner, Columbia county.....	B. S.
McCoy, W. H. ....	Buckner, Columbia county.....	B. S.
McCrimmon, Alice.....	Fayetteville, Washington county.....	B. S.
McIlroy, Kate.....	Fayetteville, Washington county.....	B. S.
McMillan, Charles .....	Pine Bluff, Jefferson county .....	M. E.
McNair, Maude .....	Fayetteville, Washington county .....	B. S.
Medlin, Robert .....	Alma, Crawford county .....	B. S.
Merritt, M. ....	Buckner, Columbia county.....	B. S.
Miser, Esther .....	Pea Ridge, Benton county .....	B. S.
Mooney, Mary .....	Fayetteville, Washington county.....	B. S.
Mooney, Robert.....	Fayetteville, Washington county.....	B. S.
Moore, J. J. ....	Cincinnati, Columbia county.....	B. S.
Moore, Martha .....	Fayetteville, Washington county .....	B. S.
Motherall, Annie .....	San Marcus, Texas .....	B. A.
Mullins, J. S. ....	Fayetteville, Washington county.....	B. S.
Murry, John .....	Lockesburg, Nevada county.....	L. I.
Neal, Abbie.....	Fayetteville, Washington county.....	B. S.
Nichols, L. E. ....	Clarksville, Johnson county .....	B. S.
Nix, Maude.....	Fayetteville, Washington county.....	B. S.
Nolen, L. C. ....	Sub Rosa, Franklin county.....	B. A.
Perry, J. W. ....	Redland, I. T. ....	M. E.
Pettigrew, J. B. ....	Charleston, Franklin county.....	C. E.
Pettigrew, Nellie.....	Fayetteville, Washington county .....	B. A.
Porter, J. R. ....	Harmony, Johnson county .....	B. A.
Price, C. C. ....	Evening Shade, Sharp county .....	B. S.
Putnam, W. H. ....	Pea Ridge, Benton county .....	C. E.
Rattenbury, Edith .....	Fayetteville, Washington county.....	B. S.
Rawlings, Frank.....	Waldron, Scott county .....	B. S.
Riley, Cora .....	Fayetteville, Washington county.....	B. S.
Rosser, Jettie.....	Evansville, Washington county.....	B. S.
Russell, David.....	Morrilton, Conway county .....	B. S.
Rutherford, S. C. ....	Moffit, Washington county.....	L. I.
Sadler, Daisy .....	Fayetteville, Washington county.....	B. S.
Scott, Mamie .....	Fayetteville, Washington county .....	B. S.
Self, Thomas .....	Little Rock, Pulaski county .....	B. S.
Shinn, J. R. ....	Lockesburg, Sevier county .....	B. A.
Simonds, Allie .....	Fayetteville, Washington county .....	B. S.
Smith, Gertie .....	Fayetteville, Washington county .....	B. S.
Smith, Albert .....	Fayetteville, Washington county.....	M. E.
Spencer, W. M. ....	Charleston, Franklin county.....	C. E.
Spears, Thomas R. ....	Clarksville, Johnson county.....	B. S. A.
Speir, Thomas U. ....	Speir, Crawford county .....	B. S.
Suggs, C. F. ....	Little Rock, Pulaski county .....	C. E.
Swope, Maggie.....	Fayetteville, Washington county.....	L. I.
* Taylor, Mattie.....	Fayetteville, Washington county.....	B. S.
Thompson, Frank.....	Lonoke, Lonoke county .....	B. S.

NAME.	RESIDENCE.	COURSE.
Treadwell, M. F.....	Fayetteville, Washington county.....	B. A.
Vaulx, Kate.....	Fayetteville, Washington county.....	B. S.
Wade, Lila.....	Fayetteville, Washington county.....	B. A.
Wainwright, Joe.....	Fayetteville, Washington county.....	B. A.
Wainwright, J.....	Fayetteville, Washington county.....	C. E.
Washington, R.....	Cincinnati, Washington county.....	B. S.
White, Fannie.....	Dutch Mills, Washington county.....	L. I.
Williams, Jennie.....	Fayetteville, Washington county.....	B. A.
Williams, W. M.....	Fayetteville, Washington county.....	B. S.
Willis, Stark.....	Graysport, Grenada county, Miss.....	B. A.
Wilson, J. C.....	Summerville, Calhoun county.....	L. I.
Wilson, G. R.....	Fayetteville, Washington county.....	B. A.
Witt, Earle.....	Conway, Faulkner county.....	B. S.
Wood, W. H.....	Fayetteville, Washington county.....	M. E.
Wood, J. L.....	Clarksville, Johnson county.....	B. S. A.
Wood, Norma.....	Van Buren, Crawford county.....	B. A.
Wooten, Daisy.....	Hot Springs, Garland county.....	B. A.
Wright, Archie.....	Fayetteville, Washington county.....	B. S.
Wright, R. R.....	Burnville, Sebastian county.....	B. S. A.
Total number of pupils in Sub-Freshman Class.....		138

# A CLASS.

NAME.	RESIDENCE.	COURSE.
Adams, C. D.....	Fayetteville, Washington county.....	B. S.
Anderson, R. S.....	Fayetteville, Washington county.....	C. E.
Appleby, George.....	Fayetteville, Washington county.....	C. E.
Ash, Ed. N.....	Fayetteville, Washington county.....	C. E.
Bare, Joshua.....	Piggott, Clay county.....	B. S. A.
Beattie, Godwin.....	Fayetteville, Washington county.....	B. S.
Beavers, E. J.....	Charleston, Franklin county.....	C. E.
Belden, W. R.....	Chismville, Logan county.....	C. E.
Libb, Lillian D.....	Franklin, Simpson county, Ky.....	B. A.
Bishop, Annie.....	Fayetteville, Washington county.....	B. S.
Blakely, William R.....	Fordyce, Dallas county.....	B. S.
Bradley, John B.....	Walnut Hills, Lafayette county.....	B. S.
Braly, E. K.....	Fayetteville, Washington county.....	C. E.
Brookfield, Vida.....	Fayetteville, Washington county.....	B. S.
Brown, Harold.....	Fayetteville, Washington county.....	B. S.
Brown, E. M.....	Fayetteville, Washington county.....	B. S. A.
Bruce, Ed. R.....	Conway, Faulkner county.....	B. S.
Burchan, L. C.....	Pauline, Franklin county.....	C. E.
Buercklin, Fred W.....	Fayetteville, Washington county.....	M. E.
Burke, M. V.....	Fayetteville, Washington county.....	B. S. A.
Cabell, Jennie.....	Fayetteville, Washington county.....	B. S.
Cagwin, E. C.....	Fort Smith, Sebastian county.....	B. S.
Campbell, Herbert.....	Fayetteville, Washington county.....	B. A.
Carrigan, B. B.....	Washington, Hempstead county.....	B. A.
Carter, Jessie.....	Fayetteville, Washington county.....	B. S.
Clancy, Nellie.....	Fayetteville, Washington county.....	B. S.
Clifton, Joseph A.....	Conway, Faulkner county.....	B. S.
Cole, Lillie.....	Fayetteville, Washington county.....	B. S.
Cole, Mattie.....	Fayetteville, Washington county.....	B. S.
Cole, Charles.....	Fayetteville, Washington county.....	M. E.
Cole, O. H.....	Fayetteville, Washington county.....	L. I.



NAME.	RESIDENCE	COURSE.
Conner, Birdie.....	Fayetteville, Washington county.....	B. S.
Cooper, E. T.....	Fayetteville, Washington county.....	B. S.
Cotner, Joseph S.....	Chismville, Logan county.....	B. S.
Cawood, V. Henry.....	Osage Mills, Benton county.....	B. S.
Cox, Robert S.....	Gassville, Baxter county.....	B. A.
Darr, William E.....	Atkins, Pope county.....	B. S.
Davies, Ena.....	Fayetteville, Washington county.....	B. S.
Davis, Maude.....	Fayetteville, Washington county.....	B. S.
Davis, John M.....	Clarksville, Johnson county.....	B. S.
Drees, C. J.....	Little Rock, Pulaski county.....	B. S.
Ellis, Miggie.....	Fayetteville, Washington county.....	B. S.
Ellison, Don.....	Ola, Yell county.....	B. S.
Evins, Hugh C.....	Fayetteville, Washington county.....	B. S.
Fleming, Arch.....	Fayetteville, Washington county.....	B. S.
Fromholtz, F. E.....	Lonoke, Lonoke county.....	C. E.
Gates, Oscar M.....	Fayetteville, Washington county.....	B. S. A.
Glenny, Ernest.....	Eureka Springs, Carroll county.....	B. S. A.
Griffith, Alma.....	Fayetteville, Washington county.....	B. S.
Guilliams, Jesse M.....	Farmington, Washington county.....	B. S. A.
Guilliams, R. P.....	Farmington, Washington county.....	B. S. A.
Guilliams, W. E.....	Farmington, Washington county.....	B. S. A.
Hale, W.....	Fayetteville, Washington county.....	L. I.
Hale, Gurtha.....	Lufra, Ouachita county.....	B. S. A.
Halley, Dixie.....	Halley, Desha county.....	B. A.
Hammett, Lee.....	Fort Smith, Sebastian county.....	C. E.
Hargus, John.....	Kingsland, Cleveland county.....	M. E.
Haws, J. P.....	Fayetteville, Washington county.....	B. S.
Hayes, S. G.....	Cotton Plant, Woodruff county.....	C. E.
Hagood, Clara.....	Boonsboro, Washington county.....	B. S.
Hicks, J. W.....	Magnolia, Columbia county.....	B. S.
Hocott, J. J.....	Riverside, Woodruff county.....	B. S. A.
Holcombe, Joe Belle.....	Fayetteville, Washington county.....	B. S.
Hopper, John R.....	Riverside, Woodruff county.....	B. S. A.
Howell, Carrie.....	Fayetteville, Washington county.....	B. S.
Hunt, Nellie.....	Fayetteville, Washington county.....	B. S.
Hunt, S. L.....	Fayetteville, Washington county.....	B. S.
James, T. H.....	Fayetteville, Washington county.....	B. S.
Johnson, S. J.....	Fayetteville, Washington county.....	B. S.
Johnson, R. L.....	Jonesboro, Craighead county.....	B. A.
Jones, Fred.....	Fayetteville, Washington county.....	B. S.
Jones, L. R.....	Fayetteville, Washington county.....	B. S.
Kemp, Fannie.....	Fayetteville, Washington county.....	B. S.
Kenner, R. B.....	Osage, Carroll county.....	B. S.
King, O. O.....	Harmony, Johnson county.....	B. S.
Kirby, Bertie.....	Boonsboro, Washington county.....	L. I.
Lane, Mattie.....	Fayetteville, Washington county.....	B. S.
Lane, S.....	McCrory, Woodruff county.....	B. S. A.
Lasater, N. A.....	Mulberry, Franklin county.....	B. S. A.
Lawler, T. D.....	Little Rock, Pulaski county.....	B. S.
Lee, R. R.....	Deaslee, Lafayette county.....	B. S.
Lee, S.....	Lewisville, Lafayette county.....	B. S.
Leverett, Rose.....	Fayetteville, Washington county.....	B. S.
Lewis, Lena.....	Fayetteville, Washington county.....	B. S.
Lipsey, Alva.....	Fayetteville, Washington county.....	B. S.



NAME.	RESIDENCE.	COURSE.
Logan, D. P.	New Lewisville, Lafayette county	B. A.
Loller, Tennie	Fayetteville, Washington county	B. S.
Luther, Lula	Fayetteville, Washington county	B. S.
Marshall, C. D.	Little Rock, Pulaski county	M. E.
Mayes, Cora	Fayetteville, Washington county	B. S.
Mayes, Lula	Fayetteville, Washington county	B. S.
Mayes, W. L.	Pryor's Creek, I. T.	B. S.
May, Mamie	Fayetteville, Washington county	B. S.
McCoy, H. S.	Robinson, Benton county	B. S. A.
McCreight, Luther	Brinkley, Monroe county	M. E.
McNair, May	Fayetteville, Washington county	B. S.
Miller, F. H.	Huntington, Sebastian county	B. S. A.
Mills, Fannie	Clarendon, Monroe county	L. I.
Mixix, T. N.	Robinson, Benton county	B. S. A.
Mitchell, S.	Greenway, Clay county	B. S. A.
Moberly, E.	Illawara, East Carroll county	B. S.
Moberly, H.	Illawara, East Carroll county	B. S.
Mobley, J. C.	Jonesboro, Craighead county	B. A.
Montgomery, Percy	Jacksonville, Pulaski county	B. S.
Moore, Ada	Cincinnati, Washington county	B. S.
Moore, Pearl	Fayetteville, Washington county	B. S.
Morgan, G. K.	Van Buren, Crawford county	B. S.
Morley, Claude	Fayetteville, Washington county	B. S.
Morris, Charles	Harrison, Boone county	B. S.
Munn, J. B.	Laneburg, Nevada county	B. S.
Murfee, Howard	Fayetteville, Washington county	B. S.
Murfee, M.	Fayetteville, Washington county	B. S.
Myers, Cora	Fayetteville, Washington county	B. S.
Myers, Belva	Fayetteville, Washington county	B. S.
Morrow, R. M.	Fayetteville, Washington county	C. E.
Nail, G. W.	Surrounded Hill, Prairie county	B. S.
Oliver, M.	Fayetteville, Washington county	B. S.
Paris, E. C.	Fayetteville, Washington county	E. C.
Perry, Mary	Redland, I. T.	B. S.
Perry, S. C.	Redland, I. T.	M. E.
Porter, W.	Clarksville, Johnson county	B. A.
Putnam, Leigh	Fayetteville, Washington county	B. S.
Ray, H. W.	Queen City, Texas	B. S.
Redwine, Lee	Cavanaugh, Sebastian county	M. E.
Reynolds, Hattie	Boonsboro, Washington county	B. S.
Roark, Lizzie	Fayetteville, Washington county	B. S.
Rose, Milton	Little Rock, Pulaski county	B. S.
Sadler, Hoyt	Fayetteville, Washington county	B. S.
Sadler, Jasmine	Fayetteville, Washington county	B. S.
Sanderson, S. A.	Robinson, Benton county	L. I.
Schofield, W. C.	Weldon, Jackson county	B. A.
Self, B. F.	Little Rock, Pulaski county	C. E.
Schultz, W. M.	White Oak, Cleveland county	B. S.
Simmons, C. M.	Boydsville, Clay county	B. S.
Skelton, C. D.	Fayetteville, Washington county	C. E.
Shuler, Fred	Buckner, Columbia county	B. S.
Smith, J. M.	Malvern, Hot Spring county	L. I.
Sneed, Thomas F.	Clarksville, Johnson county	B. S.
Sangster, R.	Hazen, Prairie county	B. S. A.

NAME.	RESIDENCE.	COURSE.
Spencer, A. R.....	Fayetteville, Washington county .....	B. S.
Spencer, J. I.....	Fayetteville, Washington county.....	C. E.
Spencer, Mamie.....	Fayetteville, Washington county.....	B. S.
Spence, L .....	Boydsville, Clay county .....	B. S. A.
Spencer, Leland.....	Charleston, Franklin county.....	B. S.
Stearnes, M.....	Fayetteville, Washington county.....	L. I.
Strange, George.....	Buckner, Columbia county.....	B. S.
Stubblefield, A.....	Cassville, Perry county.....	B. A.
Stubblefield, Dema.....	Fayetteville, Washington county.....	B. A.
Stubblefield, Ed A.....	Fayetteville, Washington county.....	B. A.
Swift, J. M.....	Smeadley, Johnson county.....	B. S.
Taylor, Rose.....	Fayetteville, Washington county.....	B. S.
Thurman, C.....	Cincinnati, Washington county.....	B. S.
Thomas, H. M.....	Forrest City, St. Francis county.....	B. S.
Thomason, J. D.....	Cincinnati, Washington county.....	B. S.
Turner, N. G. ....	Marvell, Phillips county.....	B. A.
Turner, B. E.....	Marvell, Phillips county.....	B. A.
Turley, Lee .....	Forrest City, St. Francis county.....	B. S.
Vaughan, Mollie.....	Fayetteville, Washington county.....	B. S.
Volner, Charles.....	Fayetteville, Washington county.....	B. S.
Ward, W.....	Mulberry, Franklin county.....	B. S.
Wells, J. M.....	Alma, Crawford county.....	B. S.
Williams, Hattie.....	Fayetteville, Washington county.....	B. A.
Williams, Robert.....	Lonoke, Lonoke county.....	B. S.
Willis, Lewis.....	Graysport, Grenada county, Miss.....	B. S.
Woodin, F. H.....	Texarkana, Miller county.....	B. S.
Woods, C. L.....	Hackett City, Sebastian county.....	B. A.
York, J. M.....	Fayetteville, Washington county.....	B. S. A.
Young, P. T.....	Magnolia, Columbia county.....	B. S.
Total number of pupils in "A" Class.....		168

## B CLASS.

NAME.	TOWN.	COUNTY.
Adams, Isaac.....	Fort Smith .....	Sebastian
Agee E. W.....	Camden .....	Ouachita
Armstrong, A.....	Van Buren .....	Crawford
Arnett, W. B.....	Fayetteville .....	Washington
Baker, Minnie .....	Fayetteville .....	Washington
Baker, T. A.....	Buckner .....	Columbia
Baum, Gertie.....	Fayetteville .....	Washington
Black, Leo.....	Lilly .....	Ouachita
Bloyed, Annie .....	Fayetteville .....	Washington
Boothe, W. A.....	Boothe .....	Scott
Bradley, F.....	Ozark.....	Franklin
Bradley, W. F.....	Eureka Springs.....	Carroll
Brown, Mary.....	Fayetteville .....	Washington
Cole, Lizzie.....	Dardanelle .....	Yell
Cole, Lula.....	Fayetteville .....	Washington
Coleman, L. R.....	Cavanaugh .....	Sebastian
Conner, Ethel .....	Fayetteville .....	Washington
Cookson, S.....	Fayetteville .....	Washington
Curry, Merle.....	Fayetteville .....	Washington
Curry, Roy.....	Fayetteville .....	Washington
Davidson, J. R.....	Ozark.....	Franklin

NAME.	TOWN.	COUNTY.
DeBois, J. T.	Judsonia	White
Demarcke, E. L.	Arkansas City	Desha
Dollarhide, J. M.	Lockesburg	Sevier
Drake, J. A.	Buckner	Columbia
Duncan, Eleanor	Fayetteville	Washington
Eldridge, Elmer	Brinkley	Monroe
Embry, Ernest	Atkins	Pope
Fleming, Pearl	Fayetteville	Washington
Goodrich, Oliver	Brinkley	Monroe
Gray, D. R.	LaGrange	Lee
Gray, B. C.	Fayetteville	Washington
Guilliams, G. N.	Farmington	Washington
Hardin, Kate	Fayetteville	Washington
Harper, George R.	Mansfield	Sebastian
Hayden, C.	Chouteau, I. T.	_____
Henderson, May	Osage Mills	Benton
Howell, Henry	Russellville	Pope
Hughes, Irvin	Dickey	Pulaski
Hunt, Howard	Fayetteville	Washington
Ingram, J. H.	Conway	Faulkner
James, D. W.	Fayetteville	Washington
James, R. M.	Fayetteville	Washington
Jones, D.	Fayetteville	Washington
Kantz, Maggie	Fayetteville	Washington
Kincheloe, J. A.	Conway	Faulkner
Kosminsky, Leonce	Texarkana	Miller
Kosminsky, Lewis	Texarkana	Miller
Kosminsky, Ray	Texarkana	Miller
Lackey, Annie	Fayetteville	Washington
Lackey, Daisy	Fayetteville	Washington
Lang, Ed	Fayetteville	Washington
Lewis, Lizzie	Boonsboro	Washington
Long, Tommie	Fayetteville	Washington
Luther, Clarence	Fayetteville	Washington
Macon, Thomas	Little Rock	Pulaski
Massie, F.	Huntsville	Madison
Mayes, Joe	Prior's Creek, I. T.	_____
Mayes, P.	Fayetteville	Washington
McDaniel, A. J.	Forrest City	St. Francis
McDaniel, J. H.	Forrest City	St. Francis
McNeely, W. A.	Ashville	Pulaski
McNeil, D.	Fayetteville	Washington
Mills, Tina	Clarendon	Monroe
Milam, T. R.	Sub Rosa	Franklin
Milam, A. J.	Sub Rosa	Franklin
Marlar, S. A.	Mulberry	Franklin
Morrow, Lulu	Fayetteville	Washington
Perry, Ben	Ben Lomond	Sevier
Provine, A.	Honey Grove, Tex.	_____
Ragsdale, O. O.	Siloam Springs	Benton
Robinson, Mary	Fayetteville	Washington
Sadler, F. Q.	Ozark	Franklin
Seamans, Isaac	Arkansas City	Desha
Scott, Olive	Fayetteville	Washington

NAME.	TOWN.	COUNTY.
Shannon, Dora.....	Fayetteville.....	Washington
Sherwood, A. H.....	Fayetteville.....	Washington
Shapard, Vault.....	Hickman, Ky.....	-----
Speir, C. M.....	Speir.....	Crawford
Speir, Mary.....	Speir.....	Crawford
Stone, May.....	Fayetteville.....	Washington
Stubblefield, Garfield.....	Fayetteville.....	Washington
Stubblefield, Frank.....	Fayetteville.....	Washington
Swope, Allie.....	Fayetteville.....	Washington
Taylor, C.....	Fayetteville.....	Washington
Thompson, S. W.....	Honey Grove, Tex.....	-----
Thorne, W. E.....	Marked Tree.....	Poinsett
Wade, J. S.....	Fayetteville.....	Washington
Ward, O.....	Staunton.....	Washington
Warren, J. L.....	Buckner.....	Columbia
White, Ittie.....	Fayetteville.....	Washington
White, Fred.....	Fayetteville.....	Washington
Williams, Fred.....	Paris.....	Logan
Total number of pupils in "B" Class.....		93

## IRREGULAR.

NAME.	TOWN.	COUNTY.
Core, Elias.....	Boonville.....	Logan
Humphreys, J.....	Fort Smith.....	Sebastian
Killen, F.....	Fayetteville.....	Washington
Rutledge, Lena.....	Fayetteville.....	Washington
Thomas, Alice.....	Fayetteville.....	Washington
Total number of irregular pupils.....		5

## NOT CLASSIFIED.

NAME.	TOWN.	COUNTY.
Brown, C. W.....	Dardanelle.....	Yell
Brookfield, J.....	Fayetteville.....	Washington
Gaskell, L.....	Fayetteville.....	Washington
Gilbreath, J. C.....	West Fork.....	Washington
Graham, Edwin.....	Malvern.....	Hot Spring
Harrison, Thomas.....	Fayetteville.....	Washington
Hart, Ralph.....	Thompson.....	Washington
Henley, J. F.....	St. Joe.....	Searcy
Keith, Charles.....	Cherokee City.....	Benton
Leverett, Edward.....	Fayetteville.....	Washington
Massie, O. H.....	Fayetteville.....	Washington
Mathews, Thomas.....	Marion.....	Crittenden
McKeever, W. A.....	Fayetteville.....	Washington
Monroe, C. D.....	Augusta.....	Woodruff
Moore, F. U.....	Fayetteville.....	Washington
Phillips, F.....	Fayetteville.....	Washington
Rattenbury, W.....	Fayetteville.....	Washington
Sample, Carl.....	West Fork.....	Washington
Sherwood, L. E.....	Fayetteville.....	Washington
Townsend, J.....	Little Rock.....	Pulaski
Total number.....		21

## CLASS OF 1891.

G. V. Skelton, Valedictorian.

Mack Martin, Salutatorian.

## DEGREES CONFERRED.

The following students received the degrees affixed to their names :

Drake, C. H.....	C. E.	Patton, C. C.....	B. A.
Horton, S. A.....	B. A.	Shreve, A. W.....	C. E.
Martin, Mack.....	M. E.	Shreve, H. B.....	C. E.
Newman, A. J.....	B. A.	Skelton, G. V.....	C. E.

## SUMMARY BY CLASSES.

Post Graduates .....	5
Seniors .....	10
Juniors .....	12
Sophomores .....	28
Freshmen .....	60
Sub-Freshmen .....	138
A's .....	168
B's .....	93
Not classified .....	21
Irregulars .....	5
Law .....	6
Music .....	45
Elocution .....	60
Total.....	652
Names repeated (Music 17, Elocution 60, Irregulars 2) .....	79
Total at Fayetteville .....	573



## SUMMARY BY COURSES.

	Males.	Females.	Total.
Doctor of Philosophy .....	2	3	5
Bachelor of Arts .....	57	18	75
Bachelor of Science .....	117	85	202
Civil Engineering .....	52		52
Mechanical Engineering .....	24		24
Bachelor of Scientific Agriculture .....	33		33
Licentiate of Instruction .....	13	17	30
Irregular .....	2		2
" B " Students (courses not assigned) .....	64	29	93
Not classified .....	20	1	21
Irregular (in course and class) .....	1	2	3
Law students .....			6
Music pupils .....			45
Elocution pupils .....			60
Total .....			652
Names repeated (in music 17, elocution 60, irregular 2) .....			79
Total at Fayetteville .....			573
Students in Medical Department, Little Rock .....			113
Students in Branch Normal, Pine Bluff .....			215
Grand total .....			901

## THE UNIVERSITY AND THE STATE.

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The University is at the head of the public educational system of the State of Arkansas. It seeks to foster the higher educational interests of the State, broadly and generously interpreted, and to make provision for the demands of advanced scholarship in as many lines as its means will permit. It is the effort of its Faculty and Board of Trustees, from year to year, to bring it into still closer connection with the public schools of the State, and in connection with them to afford to all the youth of either sex ample facilities for liberal education in literature, science and the industrial arts, and for the professional studies.

Through the aid received from the United States and from the State of Arkansas, the University is enabled to offer free tuition, except in the study of medicine, and thus to open wide her doors to all seekers of learning.

### LOCATION.

The University, except its Medical College, and Branch Normal College, is located at Fayetteville, Washington County, in Northwest Arkansas, among the Ozark Mountains, and is more than sixteen hundred feet above the sea level. The location is thought to be unsurpassed by any other locality in the State in salubrity of climate, beauty of surrounding scenery, fertility of soil, variety and perfection of agricultural and horticultural productions, and in the morality and intelligence of its people.

Students may reach Fayetteville from both the north and the south by double daily trains on the Texas branch of the St. Louis & San Francisco Railroad, which now connects on the south with the Little Rock & Fort Smith Railroad at Van Buren.

### ARRIVAL OF STUDENTS.

Students, on arriving at Fayetteville, must report at once to the President of the University. No student will be allowed to recite in any class until properly enrolled, but will be held responsible for his conduct from the time of his arrival in Fayetteville.

# ORGANIZATION OF THE UNIVERSITY.

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The following are the schools and courses :

## I. AT FAYETTEVILLE.

1. The School of Agriculture.
  - (a.) The Experiment Station.
  - (b.) Farmer's Course.
2. The School of Mechanic Arts and Engineering.
  - (a.) Course in Mechanical Engineering.
  - (b.) Course in Civil Engineering.
  - (c.) Course in Electrical Engineering.
  - (d.) Manual Training Normal Course.
3. The School of Science.
  - (a.) Course in Chemistry.
  - (b.) Course in Entomology.
  - (c.) Course in Zoology.
  - (d.) Course in Botany.
  - (e.) Course in Horticulture.
4. The School of Liberal Arts.
  - (a.) Course in Arts.
  - (b.) Graduate Courses.
5. The Normal School.
  - (a.) Normal Course.
6. The University High School.
  - (a.) General Course.
  - (b.) Agricultural and Mechanical Course.

## II. AT LITTLE ROCK.

7. The School of Medicine.
  - (a.) Course in Medicine.

## III. AT PINE BLUFF.

8. Branch Normal College.
  - (a.) Normal Course.
  - (b.) Classical Course.
  - (c.) Mechanical Course.

## REQUIRED, ELECTIVE AND OPTIONAL STUDIES.

Each student must have not less than fifteen hours per week of lectures, recitations and laboratory work ; two and a half hours of laboratory work being considered equivalent to one

hour of recitation. When less than fifteen hours is mentioned for any class, the student must elect studies to supply the deficiency. Students of superior energy and mental capacity are allowed, with the consent of their professors, to take optional studies in addition to the required number of hours, but this privilege will be withdrawn if any study is not properly kept up.

#### SPECIAL STUDENTS.

Persons of mature years and judgment, who have passed the examinations for admission, are allowed to pursue irregular courses of study; but they must, in all cases, satisfy their professors that they are prepared for the work of the class they seek to enter.

#### TERM EXAMINATIONS.

At the close of each term examinations are held. In order to "pass," a student must obtain 75 per cent. in each subject.

Students who are unsuccessful in any subject of a term are reported by the professor as being "incomplete" or as "conditioned." "Incomplete" work may be made up at the convenience of the professor concerned; "conditions" may be made up within two terms. Conditions of any term that are not made up by the beginning of that term must be taken over in class.

#### THE LIBRARY.

During the past year great improvements have been made in the library. The book-room has been entirely refitted with new cases. These new cases are of walnut and pine, and are substantial and neat in appearance. They will accommodate 14,000 volumes, nearly three times the number the library now contains, and there is further room on the floor for two more cases, which will contain about 3000 volumes more. When the floor space is entirely occupied a second tier of shelves can be built upon those already made and access furnished to those by means of a gallery. This will about double the capacity of the library, and thus enable us to take care of 34,000 volumes or more.

The Reading-room has been furnished with new tables and chairs. Appropriations made at the December meeting of the Board of Trustees will enable us to supply the library with cases, cards, etc., for a card catalogue, a type-writer, pamphlet cases, improved newspaper-file holders, and other fittings for a modern library. Work upon the card catalogues has already been begun.

It has been thought best to change from the old system of classifying books by case, shelf and number, to what is known as relative classification. The old system is not adapted to a growing library, because the shelves are constantly becoming full, then new material on the same subject must either be placed in another part of the library, or books must be moved to allow the new books a place beside the old. This necessitates changing the case, shelf and book numbers, and all of these changes must be accompanied by corresponding changes in the printed or card catalogue. This is such expensive work that good catalogues are beyond the means of any but the wealthiest libraries. The new system gives to every book in the library a number which it is never necessary to change. Further, this number will cause every book to take its proper place in the library by the side of the book to which it is the most nearly related. For illustration, suppose the library contains a History of the Reign of Charles I, of England. Its number would be 942.062. If a History of the Reign of Cromwell should be received tomorrow, it would be numbered 942.064, and it would be placed next to Charles I, if there was no History of the Commonwealth. But the latter would always have a right to the number 942.063, and when it came to the library it would receive this number and be put between the two first-mentioned works. Finally, any work has the same number in all libraries which use the Dewey system, so that one index or catalogue serves for all. This index is furnished to all users of the system. It contains, at the present time, about 30,000 references. A few words of description will enable the reader to understand the essential features of the system: All topics are divided into ten class numbers, ranging



from 0 to 10, the first number, 0 including all works too general to go into any other class, such as newspapers, general cyclopedias, periodicals, etc. Each of these classes is subdivided into ten divisions, numbered as before, from 0 to 10. The first division, 0, includes all works of that class too general to go into any of the other nine divisions. To illustrate, 5 is the class number of Natural Sciences; then 5 followed by 0, *i. e.* 50, would include all works on Natural Sciences too general to go under any specific division, such as a Cyclopedia of Natural Sciences. Each of these divisions is again subdivided into ten sections, 0, as before, representing the general section. Suppose, now, Loomis' Trigonometry is to be assigned a number. It belongs to Class 5 (Natural Sciences), Division 1 (Mathematics), Section 4 (Trigonometry). Its number, therefore, would be 514. All other Trigonometries would be similarly numbered; and, of course, since the library is arranged according to these numbers, they would stand together on the shelves. Moreover, since Geometries belong to the same class and division, but Section 3 instead of 4, they would be numbered 513, and would stand just before the Trigonometries, and Algebras would be numbered 512, Arithmetics 511, etc. Thus, the whole Library of Mathematics would be together, and it would not make any difference how much it grew, there is a place for every possible book on the subject. Every book has its place waiting for it. When books of a certain class overflow (and this must happen frequently in a growing library), the space allotted to them in the library can be re-arranged without changing a single label on a book or reference in a catalogue.

The library contains almost exactly 5000 volumes. With the liberal appropriations made by the Board its growth in the future will be rapid. The reading-room is furnished with the principal magazines and reviews, general and scientific, besides a large number of agricultural papers, and nearly all of the county papers published in Arkansas.

## MUSEUMS.

The University has two museums, which are indispensable in furnishing materials for the illustration of scientific students and the industrial arts.

## MUSEUM OF NATURAL HISTORY.

The cabinet of minerals consists of a collection of State minerals, contributed by various parties living in the State and by the professors; but it has recently been enlarged by purchase and exchanges and contains many valuable specimens.

There has been constructed an herbarium case large enough to hold the indigenous plants of North America and such exotics as are of economic value. It will be the work of years to complete a collection of the plants of North America, but the work is progressing; and the collection is large and valuable.

There are about 500 species of animals, illustrating the various branches of zoology.

Collections in all the departments are accumulating.

Contributions of minerals, fossils, Indian relics and rare curiosities are solicited.

## INDUSTRIAL MUSEUM.

Among the facilities for instruction contained in the equipment of the University, may be mentioned:

A Dean steam pump with air chamber, water and steam cylinders and valve chambers sectioned, so that a student may see the working parts.

A Cameron steam pump with the steam cylinder sectioned.

A Blake steam pump in full working order.

Two small horizontal and one vertical steam engine made by the students in the shop.

A fire hydrant in working order.

Samples of articles of manufacture form a large part of the collection and are found to be of great service in acquainting students with the construction. Among these may be mentioned link belting, steam pipe covering, grease cups, injectors

in sections, water meters, insulated wire, lead cables and lubricating oils. Models of a large number of machines of various kinds are also in the collection.

### LABORATORIES.

In the laboratories of the University opportunities are afforded for practical instruction in chemistry, mineralogy, physics, botany, zoology, entomology, horticulture and civil, mechanical and electrical engineering.

#### CHEMICAL LABORATORY.

The chemical laboratories are well supplied with apparatus and have accommodations for twenty students in qualitative and quantitative analysis, and twenty-two students in general chemistry. The appliances are of the latest design, gas and water at every desk, and all requisites for chemical work.

#### MINERALOGICAL LABORATORY.

This laboratory has work benches for eight students, and is supplied with all requisites for blow-pipe work and the general examination and assaying of minerals.

#### PHYSICAL LABORATORY.

The new physical laboratory will accommodate twenty-eight students. It is fitted with a small dynamo and a fair supply of general apparatus for work in practical physics.

#### BIOLOGICAL LABORATORY.

The biological laboratory has one room devoted to zoology and one to botany. The former has an aquarium for the preservation of material for zoology classes. Breeding cages, drying boards, and all the apparatus needed for the mounting and preservation of insects. The latter has all the apparatus useful for the collection and preservation of plants. Both have microscopes, microtomes, microscopic and chemical reagents, water, gas, and a fair amount of apparatus for experimental physiology.

## ENGINEERING LABORATORIES.

*Shops.*—The shop building, erected in the spring of 1889, is of corrugated iron, 170 feet long, 40 feet wide, one story in height, well lighted and ventilated. The wood shop is 40x60 feet in size, the machine shop 40x40 feet, the forge shop 40x25 feet, and the foundry 40x45 feet.

*The Wood-Working Shop*, is equipped with eighteen well appointed work benches with tools, seven turning lathes, one pattern maker's lathe, one double circular saw, one scroll saw, one band saw, one reversible shaping machine, one planing machine, one steam glue heater and one trimmer.

*The Equipment of the Forging Shop* at present consists of nine forges of the most improved design, nine anvils and nine sets of tools, consisting of hand-hammer, tongs, calipers, steel rule, steel square, hot and cold cutters, file, flatter, fullers, swedges, punches, heading tools, etc. The forges are supplied with power blast, a No. 6 Buffalo blower serving for this purpose. This shop has also a double emery grinder and a blacksmith's post drill.

*The Moulding-Room and Foundry* are equipped with a Colliau cupola which will melt from 200 pounds to one ton of iron at once, one brass furnace, one core oven, nine sand troughs and moulder's benches combined, nine sets of moulder's tools, consisting of heart and square trowel, slickers, rammers, riddle, flask, swab, water pot, shovel, lifters, drawer, spikes, etc., six ladles from 100 to 5 pounds capacity, an assortment of flasks, and other necessities for a complete foundry.

*The Equipment of the Machine Shop* consists of thirteen work benches with vises, sets of tools and closets, one 12-inch engine lathe, three 14-inch engine lathes, one 19-inch engine lathe, one speed lathe, one planer 24x24x72 inches, one planer 10x10x24 inches, one Universal milling machine (B. & S.), one double-wheel emery grinding machine, one Universal cutter grinder, one drill press, one grinding stone, and chucks and other appliances for use on the lathes, planers, etc. Each machine has its distinct set of tools. This shop is well equipped

with hammers, steel rules, steel squares, spring dividers, chisels, twist drills, taps, dies, tap wrenches, die stocks, reamers, pipe dies, files of all sizes and shapes, wrenches, arbors, lathe-dogs, squares, scales, calipers (inside and outside), machine and hand-cutting tools, a surface gauge, a surface plate, a Victor micrometer caliper, a set of caliper gaugers, a protractor and many other tools. The machinery is driven by a 25-horse-power Westinghouse engine.

*Capacity of Shops.*—Seventy-five students can be accommodated in the shops at one time, divided among the rooms as follows:

Wood-working Room .....	24
Metal-working Room .....	18
Forging Room .....	9
Foundry .....	20
Tool Room .....	1
Engine and Boiler Rooms .....	3

*The Boiler Room* contains two horizontal flue tubular boilers set in brick work, aggregating 60-horse power. These are used for heating the main building and running the shops. This room also contains a pressure-reducing valve, an automatic heater trap and governor, Blake pump, feed water heater, Hancock inspirator, gauges and other necessary appliances.

*Drawing.*—The room in the main building set apart for drawing is 60x70 feet in size, well lighted from three sides and well ventilated. The equipment includes the usual tables and stools, and among the special apparatus and instruments may be mentioned the planimeter, pantograph, blue-print frame, traverse table, odontograph, slide rule, sets of railroad and machine curves, roof pitches, etc. Materials are kept on hand and supplied to students at catalogue rates. Drawing instruments are purchased for students at a discount.

*Surveying.*—For the work in railroad, land and city surveying, the equipment furnishes chains, tapes, plumb bobs a Locke level, aneroid barometer, sextant, Y level, transits with solar attachment, plane table, etc. Not the least valuable part of the equipment is a surrounding country which offers problems in most of the varieties of work which meet the practical surveyor.



The engine used to run the shops is also used to furnish practice in measurement of power from indicator cards and the Prony brake ; and the boilers generating steam for heating and power, also furnish practice in determining the amount of steam made for each pound of coal burned. The quality of steam is also tested by a calorimeter constructed by students. A feed pump and an injector are so arranged to feed the boilers that comparative trials may be made.

During the session of 1892, a Riehle testing machine, capable of exerting a pull or pressure of 60,000 pounds, will be installed and used in experimental work upon the materials used in buildings, bridges and machinery, and a 2000 pound cement testing machine will be used to determine the tensile strength of various cements, and their resistance to crushing.

The 180-light dynamo and the 10-horse power motor already secured, supply power to run the machinery of the laboratory and current for lighting the buildings, and for laboratory work. A storage battery, capable of supplying current at 110 volts for forty or fifty incandescent lamps of sixteen-candle power will be used for laboratory work. Instruments for electrical measurement are also provided for.

#### LITERARY SOCIETIES.

The students literary societies, three in number, meet weekly in their respective halls, and their members enjoy the advantages of debate and other literary exercises, thus acquiring general culture and becoming familiar with the popular modes of conducting business in deliberative assemblies. These societies occasionally give public entertainments, and much interest is manifested.

#### AIDS TO MORAL AND RELIGIOUS INSTRUCTION.

Religious exercises are held regularly in the University Chapel at the beginning of each daily session. Students are required to attend.

The literary societies, which have a large membership, have held regular meetings, and have maintained a reading room in the University dormitory.

The churches of Fayetteville cordially welcome the students to their Sunday-schools and various meetings for prayer and religious instruction. The denominations represented in the city are Baptist, Presbyterian, Cumberland Presbyterian, Methodist, Protestant Episcopal, Christian and Roman Catholic. Many of the students are actively engaged in the work of the different church societies and guilds.

#### SALE OF ARDENT SPIRITS NEAR THE ARKANSAS INDUSTRIAL UNIVERSITY.

By an act of the General Assembly of the State of Arkansas, approved March 6, 1875, it is unlawful for any person to sell or give any vinous or ardent spirits within three miles of the Arkansas Industrial University, unless it be prescribed by a regular practicing physician for medicinal purposes.

#### EXPENSES.

Matriculation, charged all new students.....	\$ 5 00
Tuition per session, charged all except beneficiary students.....	10 00
Music fees (see music, page 65).	
Furniture for dormitory students, at cost, usually about	15 00
Board in dormitory at cost, per month, from..	\$ 7 00 to 8 00
Board in private families, per month, from....	12 00 to 15 00
Uniform suit, purchased by student, from....	13 00 to 17 50
Washing, per month, about.....	1 00

Students leaving the University frequently sell their furniture at a small reduction.

Rooms in the University dormitory are free, but occupants provide their furniture, fuel and lights. If there are not rooms enough for all, preference is given to Arkansas students. An officer of the University lives in the building and superintends it.

Students boarding elsewhere are under the supervision of the President of the University and are allowed to board only at places approved by him.

## BOARDING FOR YOUNG LADIES.

There is at present no special residence for girls. They are assisted in finding board in respectable families; but the Faculty is not so situated as to exercise constant supervision over them out of college hours. Parents at a distance who send a daughter to the University, should therefore be well satisfied as to her discretion, or else should place her under control of the family with whom she boards.

## STUDENT LABOR.

Able-bodied male students of the Freshman class are required by law to perform ten hours' manual labor per week, either on the experimental farm or in the shops or laboratories. For farm or shop work they are paid from 3 to 10 cents per hour, according to their diligence. Some students meet their expenses by this and other labor.

## CONDITIONS OF ADMISSION INTO THE UNIVERSITY.

All applicants for admission into the University must, if required, furnish evidence of good moral character.

Dismissed, or expelled students, from other institutions of recognized standing, may be refused admission to this University.

## LIST OF SUBJECTS PREPARATORY FOR THE FRESHMAN CLASS.

1. *English.* Meikeljohn's English Grammar with analysis or a full equivalent; a composition of 200 to 300 words, correct in spelling, punctuation, paragraphing and grammar, upon a subject announced at the time of the examination. In 1893 the subject will be taken from Irving's Sketch Book or from Shakespeare's Julius Cæsar.

2. *Arithmetic.* The examination will be taken from Wentworth's Grammar School Arithmetic, the whole of which is required. Teachers preparing candidates for entrance should, in teaching arithmetic, require them to analyze every example capable of analysis, or give a thorough course in Mental Arith-

metic. Students who are not quick at analysis in Arithmetic usually make poor progress in higher mathematics.

3. *Algebra* to Quadratic Equations, involving two unknown qualities, with special attention to factoring, the theory of exponents and radicals. The examination will be taken from Robinson's University Algebra.

4. *Plane Geometry*. In 1893 candidates will be examined in first five books of Wentworth's Geometry.

5. *History*. The examination will be taken from Eggleston's History of the United States, but Barnes' History complete will give the required preparation.

6. *Geography*. Any complete manual, such as Harper's or Maury's, will give the preparation, if thoroughly mastered. Special attention is given to the geography of the United States and of Arkansas.

7. *Latin*. Jones' First Lessons in Latin complete, with all its references to Gildersleeve's Latin Grammar; Cæsar's Gallic War, two books, with questions on the implied grammar and on the subject matter, military equipment, etc. Kelsey's Cæsar or Greenough's Cæsar is recommended. In 1893 three books will be required, and in 1894 four books.

8. *Physiology*. In 1893 candidates will be examined in Martin's Human Body, briefer course.

Candidates for the higher classes, or for the Freshman Class after beginning of session, will be examined also in subjects passed over by the class.

## SPECIMEN EXAMINATIONS FOR FRESHMAN CLASS

Examinations will be of the same general character as the following:

### I. MEIKLEJOHN'S ENGLISH GRAMMAR. 2 hours.

1. Tell all the different ways of distinguishing gender; illustrate each by example.

2. Name and define all the different kinds of pronouns.

3. Give distinction between strong (or irregular) and weak (or regular) verbs, and principal parts of one strong verb and of one weak verb. Give a complete synopsis of the verb *know* in the passive voice, using the third person singular.

4 A. I. U.

4. Analyze carefully the following sentence, giving special attention to the relation of the subordinate clause to the principal clause: "The love of reading, *which* Gibbon *declared* he would not exchange for all the treasures of India, was, with Macaulay, a main *element* of happiness in one of the happiest lives *that* it has ever fallen to the lot of the biographer to *record*."

5. Parse the words italicized in the above sentence. Construe the words italicized in the following sentence: (1.) They offered *Cæsar* the crown three *times*.

6. Name the prefixes and suffixes in the following words and tell what force they have. (1) Steward, (2) gainsay, (3) golden, (4) weakness, (5) forbid, (6) stagger, (7) misdeed, (8) trickster, (9) sparkle, (10) withstand.

## II. ENGLISH COMPOSITION. 1 hour.

Write a composition of 200 to 300 words upon "The Necessity of an Education."

## III. ARITHMETIC. 2 hours.

First, second, third, fourth and fifth questions same as in examination for admission to High School.

6. See Wentworth's Arithmetic, page 236, example 9.

7. See Wentworth's Arithmetic, page 261, example 5.

## IV. ALGEBRA. 2 hours.

1. Simplify the following expressions by removing the parentheses and collecting like terms:

$$(a) \ a - [b + \frac{1}{2} a - (d + a)]$$

$$(b) \ -[5x - (11y - 3x)] - (5y - (3x - 6y))$$

2. Resolve the following into factors:

$$x^3 + y^3, x^4 - y^4, x^2 - 19x + 90, 240 + x - x^2, \text{ and } x^3 - 8.$$

3. Find the greatest common divisor of—

$$8x^3 - 2x^2 - 53x - 39 \text{ and } 4x^3 - 3x^2 - 24x - 9.$$

4. Given:  $2x + 3y + 4z = 20.$

$$3x + 4y + 5z = 26.$$

$$3x + 5y + 6z = 31.$$

To find the values of  $x, y, z.$

5. Find the cube root of—

$$1 - 9x + 39x^2 - 99x^3 + 156x^4 - 144x^5 + 64x^6.$$

6. Find the value of—

$$(\sqrt{7} + 5\sqrt{3})(2\sqrt{7} - 5\sqrt{3});$$

and the value of  $x$  in

$$14 - \sqrt{x} - 3a = 6, \text{ and}$$

$$x^2 + 6x = 27.$$

## V. PLANE GEOMETRY. 2 hours.

Demonstrate the following propositions:

1. The three perpendiculars from the middle points of the sides of a triangle meet in the same point.



2. An inscribed angle is measured by one-half of its intercepted arc.
3. Two regular polygons of the same number of sides may be constructed, the one circumscribed about a circle and the other inscribed within it, which shall differ from each other by less than any given surface.
4. What is the length of the side of a regular decagon inscribed in a circle whose diameter is 12?
5. Problem: To divide a given straight line into parts proportional to given straight lines.

VIII. LATIN. 2 hours.

Translate Cæsar's Gallic War, book I, chapter 22, from *Prima luce* to *abstinebat*.

1. Give principal parts of *abesset, accurrit, teneri, cognovisse, instruit*.
2. Explain cases of *luce, equo, quem, ei, tempore*.
3. Explain uses of modes in *teneretur, teneri, fieret*.
4. Compare *prima, summus, proximum, longius*.
5. Give the whole indicative mode of *voluerit*, and the whole subjunctive of *abesset*, and translate the first person of each tense.
6. Decline *passibus, eum, quem, insignibus, uno*.
7. Parse *hostium, occupari*.

Translate Book II, chapter 32, from *ad hæc* to *dixerunt*.

Translate into Latin:

1. He will order the lieutenant to send soldiers as a relief to our men. 2. We are so many in number that we can easily keep their army from the march. 3. If they make peace with us, we shall go into that part where they wish us to be. 4. We cannot see the mountain, although it is of great height. 5. We shall march, through Geneva at sunset, because we are not more than twenty miles distant.

Besides this an oral examination is required.

VI. U. S. HISTORY. 1½ hours.

Tell all about the following:

1. De Soto. 2. The Battle of Guilford Court House. 3. The Missouri Compromise. 4. The Doctrine of States' Rights.

VII. GEOGRAPHY. 1½ hours.

1. Name in their order twenty rivers flowing into the Atlantic Ocean or its arms between the Bay of Fundy and the Florida Keys.

2. Name the principal cities of Louisiana, Texas, Ohio, Illinois, Michigan and Minnesota (one city each), and describe their situation.

3. Describe the climate and productions of Mexico.

4 and 5. What and where are the following? Give exact location: Aconcagua, Aral, Baikal, Bothnia, Ceylon, Delhi, Farewell, Formosa, Hecla, Munich, Ponchartrain, Sunda, Verde, Volga, Yukon.

## IX. PHYSIOLOGY. 1 hour.

1. Describe the structure of the femur.
2. How does the blood-plasma differ from blood-serum?
3. Describe the formation of a blood clot.
4. Define the terms "afferent," "efferent," "voluntary," "involuntary," "reflex."
5. Name and give the most important characteristics of eight of the principal tissues of the body.

## LOCAL EXAMINATION.

Students living more than a hundred miles from the University may, by making satisfactory arrangements, obtain special local examinations two weeks before the beginning of each term. The questions will be sent to any principal of a school or county superintendent who will supervise the examination for the candidate, provided such officer makes his application in time. Such application must reach the University as early as February 1st for admission for first term, May 1st for second term and August 1st for third term. The questions must be submitted by the superintendent or principal to the candidate under the usual restrictions of a written examination, and the questions and answers must be returned by the same officer to the University with his indorsement that the examination has been properly made. Candidates should in all cases return only fair and honest answers; otherwise they will be seriously embarrassed in their future courses. The candidate must secure the consent of the principal or superintendent who is to hold the examination.

## ADMISSIONS UPON ACCREDITED CERTIFICATES.

*Accredited Schools.*—Any high school or academy whose course of instruction covers all the branches requisite for admission to the University, may be placed upon the accredited list of preparatory schools. Upon application from the principal of any high school or academy, an officer of the University will be sent as soon as possible to examine the course of study and methods of teaching. If his report is favorable, the school will be placed upon the accredited list and its graduates will be admitted to the Freshman Class without examination. Students of accredited schools who may not be grade-

uates, will be excused from examination on subjects required for admission into the University, upon certificates of proficiency in such studies from the principal. A school once placed upon the accredited list will remain there until its administration is changed or until a notification that the work is unsatisfactory is received from the University. Upon a change of administration, an application to be continued upon the list of accredited schools should be forwarded to the University. Such request may be granted without a new examination if the authorities can assure themselves that no prejudicial changes in the courses of study or in the thoroughness of instruction will be made.

The University will do all in its power to bring about that close and cordial relation which should bind together the various branches of the common school system.

#### APPOINTMENT OF BENEFICIARIES.

All appointments shall be completed, if possible, before the opening of the Spring term. The County Judges make the appointments and send them according to the directions below. If the appointee fails to appear at the University within twenty days after an appointment (except in case of sickness), he or she will be regarded as having declined the appointment, in which case it will be the duty of the President of the Faculty to notify the person making the appointment of such failure, and he, in turn, should make another appointment as soon thereafter as possible. The President of the Faculty shall continue to notify appointing officers until their respective number of appointees make their appearance at the University.

All the beneficiary students should be present at the opening of the Spring term, and unnecessary delay will lead to the forfeiture of their appointments.

#### QUALIFICATIONS.

The attention of County Judges is called to the fact that *no beneficiary students will be admitted unless they have the following qualifications :*

Students are not admitted until they have become familiar

with the fundamental principles of arithmetic as far as percentage. In reading, they must be able to understand and intelligently render specimens of the grade of the Fifth Reader, must have a good knowledge of elementary English grammar, geography, and the spelling of all words of the grade of the Fifth Reader. These qualifications are the test of admission at the beginning of the session; those applying later will be admitted only on the grade of the class. (See admission to High School, page 82.)

FORMS OF APPOINTMENT.

Students who have been appointed beneficiaries must bring evidence of appointment in the following forms of notice, to be sent by the Judge of the County Court, in accordance with the sixth section of an act approved March 6, 1875 :

No ..... [Form 1—Appointment.]  
[To be given to the Student.]  
*To whom it may concern:*  
I hereby appoint.....of.....County,  
State of Arkansas, as a beneficiary to the Arkansas Industrial University.  
Given under my hand this.....day of ..... 189..

Send a notice like the following to the President of the University, and one to the Secretary of the Board of Trustees, at Fayetteville :

[Form 2—Notice to President of University.]  
.....Arkansas. }  
*To the.....University:*  
I hereby notify you that I have this day appointed..... of  
.....County, State of Arkansas, a beneficiary to the Arkansas Industrial  
University.  
Given under my hand this..... day of ..... 189..

NUMBER OF BENEFICIARIES.

The number of beneficiaries is limited to one thousand, distributed to the counties of the State in proportion to the population of 1880, and in every case in which a county fails to supply its quota of beneficiaries, the Governor is authorized to appoint such beneficiaries to the full number authorized by law; *Provided*, That such appointment may be vacated on an application from a county so failing to fill its quota, but may be resupplied from some other county whose quota has not been filled:

COUNTIES.	Beneficiaries	COUNTIES.	Beneficiaries
Arkansas .....	10	Lee .....	16
Ashley .....	13	Lincoln .....	12
Baxter .....	7	Little River .....	6
Benton .....	24	Logan .....	19
Boone .....	15	Lonoke .....	15
Bradley .....	8	Madison .....	15
Calhoun .....	7	Marion .....	10
Carroll .....	16	Miller .....	12
Chicot .....	12	Mississippi .....	9
Clay .....	13	Monroe .....	12
Clark .....	15	Montgomery .....	7
Cleburne .....	8	Nevada .....	17
Cleveland .....	10	Newton .....	6
Columbia .....	19	Ouachita .....	15
Conway .....	16	Perry .....	6
Craighead .....	8	Phillips .....	28
Crawford .....	11	Pike .....	3
Crittenden .....	11	Poinsett .....	7
Cross .....	6	Polk .....	3
Dallas .....	9	Pope .....	19
Desha .....	11	Prairie .....	10
Drew .....	15	Pulaski .....	45
Faulkner .....	17	Randolph .....	12
Franklin .....	18	Saline .....	11
Fulton .....	8	Scott .....	19
Garland .....	11	Searcy .....	7
Grant .....	8	Sebastian .....	28
Greene .....	9	Sevier .....	8
Hempstead .....	24	Sharp .....	12
Hot Spring .....	10	Stone .....	8
Howard .....	12	St. Francis .....	10
Independence .....	21	Union .....	16
Izard .....	14	Van Buren .....	11
Jackson .....	15	Washington .....	30
Jefferson .....	29	White .....	21
Johnson .....	15	Woodruff .....	12
Lafayette .....	6	Yell .....	18
Lawrence .....	10		

There is also one "Honorary Scholarship" to each county, to be elected for superior merit and proficiency, from the public schools of each county, according to section 2 of act of July 23, 1868.

#### ABSENCES.

Absences from the University during the session are not permitted except for reasons of importance. The parent has, at all times, the right to withdraw his son entirely and finally, without reason assigned; but without so withdrawing him he cannot relieve him of the obligation to attend on his duties at the University. The incidental absences of students during the session are exceedingly disadvantageous, both to themselves and the University. While, therefore, the Faculty permit them, in cases where propriety or urgent necessity seems to make



them unavoidable, they hold it to be a duty to inquire into the reasons for which the permission is solicited.

No absences are permitted during the summer term for reasons that would not be valid at other times.

#### WITHDRAWAL OF STUDENTS.

Parents or guardians who wish to withdraw their children or wards from the University should write to the President of the Faculty, stating their wishes. No honorable discharge will be given to a student under age who is unable to produce the written application of his parent or guardian for his withdrawal, or if his number of demerits shall exceed the proportion of two hundred allowed during the session. Nor will an honorable discharge be given to a student under censure of any kind, whether for neglect of duty or other cause, even though he may have the consent of his parent or guardian for his withdrawal from the University.

## DEPARTMENTS OF INSTRUCTION.

The arrangement of elective courses enables students to concentrate their work upon special lines or subjects, and each student is expected to complete the undergraduate studies of at least one language or science. The following rules for elective studies will be observed :

1. No study can be elected, unless the professor in charge deems the student prepared to pursue it.
2. No elective study shall be changed before the end of the term.
3. No professor shall be required to teach an elective course, unless three or more students pursue it.

### DEPARTMENT OF PSYCHOLOGY AND ETHICS.

E. H. MURFEE, Professor.

These studies are taught inductively, no theory or doctrine being urged for acceptance which is not based upon a philosophical induction. The student is taught to subject every statement of fact or principle to the test of his own experience. The fullest and freest discussion of opposing views is encouraged. Recent researches in Physiological Psychology receive special attention.

#### I. *Psychology (Senior.)*

Three times a week for the first and second terms, twice a week for the third term. Ladd, McCosh, Bascom, Mahan, Porter, Sir William Hamilton.

#### II. *Ethics (Senior.)*

Once a week for two terms and twice a week for the third term. Dagg, Alexander, Bascom, Porter, Calderwood.

### DEPARTMENT OF AGRICULTURE.

A. E. MENKE, Professor.

#### I. (a.) *Veterinary Anatomy.*

Lectures and laboratory work. First term, *five times a week.*

(b.) *Veterinary Science.*Second term, *three times a week.* Third term, *twice a week.*(c.) *Agriculture.*Second term, *twice a week.* First term, *once a week.*II. (a.) *Horticulture (Sophomore).*First term, *four times a week.*(b.) *Dairy Husbandry (Sophomore).*Second and third terms, *four times a week.*(c.) *Stock-Breeding (Sophomore).*Throughout the year, *three times a week.*

## DEPARTMENT OF ENGINEERING.

C. V. KERR, Professor of Mechanical Engineering.

G. C. SCHOFF, Adjunct Professor of Civil Engineering.

H. B. SMITH, Adjunct Professor of Electrical Engineering.

S. L. GRINSTEAD, Instructor in Wood Working.

WILLIAM M. GILMORE, Instructor in Forge and Foundry.

MACK MARTIN, Instructor in Machine Shop.

W. FRENCH, Engineer.

I. *Wood Working.*Principles of carpentry and joinery; wood turning; pattern making, cabinet work. *One year's course, recitations, lectures and shop work.*II. (a.) *Founding.*Moulding; melting and pouring brass and iron; management of cupola. *Half year's course, recitations, lectures and shop work.*(b.) *Forging:* Management of fire; drawing; welding. riveting; tempering. *Half year's course, recitations, lectures and shop work.*III. *Machinist Work.*Chipping and filing; turning; planing; milling; drilling; grinding; metal fitting and erection of machinery; millwrighting; care of engines and boilers. *One year's course, recitations, lectures and shop work.*

## IV.

As a one year's course during the fourth year of the manual training course, the student may select one of the following:

(a.) Carpentry and cabinet-making.

(b.) Pattern making and founding.

- (c.) Blacksmithing.
- (d.) Machine shop work.
- (e.) Management of boilers, engines, dynamos and electric light plants.
- (f.) Actual work of instructing classes in the different shops and in laying out series of exercises.

V. *Drawing.*

Selection and use of instruments; lettering; geometrical construction; tracing and blue printing; descriptive geometry and its application; design of machines, steam engines, boilers, etc. *Six years' course.*

VI. *Elements of Mechanism, Machinery and Mill Work.*

Theory of motion and velocity ratios; designs of gear wheels, cams, link motions; alignment of shafting; transmission of power by belts, hemp and wire ropes; theory of friction; selection and use of lubricants. *One year's course.*

VII. *Mechanics.*

Elementary and analytical treatment of statics and dynamics; resistance of materials; graphical statics; hydraulics; turbines. *One and a half years' course.*

VIII. *Steam Engineering.*

- (1.) *The stationary engine:* Principles of construction and operation; study of existing types, vertical and horizontal, high-speed and Corliss engines.
- (2.) *Pumps:* Different types; boiler feed pumps, pulsometers, injectors; pumping engines.
- (3.) *Boilers:* Construction and management; fuel; chimney draft; types, tubular, water tube, sectional; valves and fittings.
- (4.) *Locomotive engines:* Construction and management; study of forms adapted to different service; link motions; air brake; train resistance.
- (5.) *Valve gears and governors:* Slide valves; Zeuner's diagrams; movement of valves by eccentric and links; theory, construction and adjustment of throttling, pendulum and shaft governors; balance of reciprocating parts.
- (6.) *Theory of compound engines:* Source of economy; principles of design; distribution of power. *Two years' course.*

IX. *Masonry Construction.*

Materials; stone and brick masonry foundations. *One term's course.*

X. *Thermodynamics.*

Action of heat on perfect and imperfect gases; hot air, gas and steam engines, injectors; mechanical refrigeration, manufacture of ice. *One year's course.*

XI. *Engineering Laboratory.*

Tests of strength and other properties of materials of construction; measurement of friction of belts, gears and lubricants; measurement of power by indicator, brake and dynamometer; boiler tests to determine evaporation of water per pound of fuel. *One year's course.*

XII. *Power Plants.*

- (1.) Study of steam and water power plants as illustrated by the best practice; specifications.
- (2.) Study of most approved methods of testing steam and gas engines, turbines, refrigerating machinery, etc. *Two terms' course.*

XIII. *Surveying.*

- (1.) Care, use and adjustment of instruments; use of chain, tape, compass, transit, solar attachment, level, sextant and plane table; exercises in land, city and mining surveying.
- (2.) *Railroad Surveying:* Reconnoissance, preliminary survey, location, profiling, establishing grade, location of curves and turnouts; measurement of embankments and cuts, estimates of volume and material used in construction; location and estimates for tunnels.
- (3.) *Hydraulic and sanitary surveying:* Location of waterworks, with details of estimates of cost; design and estimate of material required and cost of construction for a complete sewerage system. *Three years' course.*

XIV. *Bridges and Roofs.*

Analytical and graphical treatment of different forms used for bridges, highways and depots; designs. *One year's course.*

XV. *Sanitary and Hydraulic Engineering.*

- (1.) Study of the separate and combined systems of sewerage; constructive details; designs of a sewerage system.
- (2.) Location and constructive details of waterworks; standpipes, dams, pumping machinery; design of waterworks. *One year's course.*



XVI. *Engineering Structures.*

Study of recent structures, bridges, foundations and tunnels ;  
use of coffer dams, caissons and jetties ; specifications.  
*One term's course.*

XVII. *Electricity and Magnetism.*

Theory of electricity and magnetism ; measurement of resistance, electro-motive force, current ; use and calibration of instruments ; batteries, electro-magnets, etc. *One year's course.*

XVIII. *Dynamo-Electric Machinery.*

- (1.) *Dynamos* : Open and closed coil, direct and alternating current, series, shunt and compound wound ; characteristic curves ; arc and incandescent lamps.
- (2.) *Motors* : Series and shunt wound, direct and alternating current ; stationary and street-car types.
- (3.) *Storage Batteries* : Chemical action in the cell ; construction and use.

XIX. (4.) *Electric Transmission of Energy.*

Study of the distribution of electricity ; plans and calculations for systems of wiring. *One year's course.*

XX. *Electric Light and Power Plants.*

- (1.) Study of recent electric light and street railway plants ; specifications.
- (2.) Study of approved methods of testing the efficiency of light and power plants. *One term's course.*

XXI. *Law.*

Study of patent law and contracts. *One term's course.*

XXII. *Thesis.*

Original work, planned and executed by the students ; subject chosen must be covered by previous work and approved by the instructor. *One term's work.*

## DEPARTMENT OF CHEMISTRY AND PHYSICS.

A. E. MENKE, Professor.

W. B. BENTLEY, Adjunct Professor.

I. (a.) *General Chemistry (Sophomore).*

Lectures and recitations *three times a week first and second terms ; five times a week third term.* Laboratory work *two afternoons weekly throughout the year.* Text books, Richter, Remsen, Fischer.

(b.) *Chemical Philosophy (Sophomore).*

Lectures and recitations *four times a week in the third term.* Text books, Meyer, Tilden.

(c.) *Organic Chemistry (Junior).*

Lectures and recitations *three times a week throughout the year.* Text book, Richter.

(d.) *Analytical Chemistry (Junior).*

Lectures and recitations *five times a week the first term.*  
Laboratory work *in the afternoon according to course.*

(e.) *Technical Chemistry (Senior).*

Lectures and recitations *three times a week throughout the year.* Text books, Ost, Wagner.

II. (a.) *General Physics.*

Lectures and recitations *four times a week throughout the year.* Laboratory work, *one afternoon per week.*

(b.) *Heat (Sophomore).*

Lectures and recitations *twice a week throughout the year.*  
Laboratory work *one afternoon per week.*

III. (a.) *Mineralogy (Junior).*

Recitations *daily during the second term.*

(b.) *Metallurgy (Senior).*

Lectures and recitations *three times a week throughout the year.* Text books, Bloxam, Bell, etc.

NOTE.—Afternoon work two to four days per week varying with the student's course throughout the year.

## DEPARTMENT OF MATHEMATICS AND LOGIC.

O. C. GRAY, Professor.

G. W. DROKE, Adjunct Professor.

I. (a.) *Advanced Algebra (Freshman).*

Robinson's University Algebra. *First term, five times a week.*

(b.) *Geometry (Freshman).*

Wentworth's Geometry. *Second term, four times a week.*

(c.) *Trigonometry (Freshman).*

Schuyler's Trigonometry. *Third term, four times a week.*

- II. *Analytical Geometry and Calculus (Sophomore).*  
Loomis's Analytical Geometry; Loomis's Calculus. *Year's Course, four times a week.*
- III. *Logic (Junior).*  
Jevon-Hill's Logic. *First two terms, three times a week.*
- IV. *Descriptive Astronomy (Senior).*  
Newcomb and Holden's Astronomy. *Third term, four times a week.*

BOOKS OF REFERENCE.—*Algebra*: Wentworth, Wells, Davies, Hill, Locke, Loomis, Todhunter, Bowzer and others. *Geometry*.—Schuyler, Loomis, Welch, Chauvenet, Davies, Bowzer, Hill, Locke and others. *Trigonometry*.—Wells, Wentworth, Olney, Loomis, Bowzer and others. *Analytical Geometry*.—Loomis, Olney, Todhunter, Davies, Robinson and others. *Calculus*.—Church, Byerly, Williamson, Davies, Robinson and others.

NOTE.—Logic is taught both from text-books and by lectures. Students are required to show its application in various scientific investigations. Essays from different authors are analyzed and discussed, with a view to the appreciation of sound reasoning and detection of fallacies. Original discourses are required of students to impress the principles taught. In this way a subject, ordinarily regarded as dry, is made of the liveliest interest. *Text-books and Books of Reference*.—Jevon-Hill, McCosh, Mill and Hamilton.

## DEPARTMENT OF BIOLOGY AND GEOLOGY.

J. F. MCNEILL, Professor.

S. E. MEEK, Adjunct Professor.

### I. *General Biology (Freshman).*

A study of typical species of plants and animals, with reference to structure, development and relationship. Lectures three times a week. Laboratory work six hours a week. *Throughout the year.*

### II. (a.) *Morphology and Classification of Flowering Plants.*

Lectures three times a week. Laboratory work four hours a week. *Throughout the year.*

### (b.) *Cryptogamic Botany.*

Lectures three times a week. Laboratory work four hours a week. *First term.*

(c.) *Physiological Botany.*

Lectures three times a week. Laboratory work four hours a week. *Second and third terms.*

(d.) *Advanced Botany.*

Reading and Laboratory work. *Throughout the year.*

III. (a.) *Systematic Zoology.*

Lectures three times a week. Laboratory work in the classification of birds, mammals, reptiles and fishes, four hours a week. *First and second terms.*

(b.) *Comparative Anatomy.*

Lectures three times a week. Laboratory work four hours a week. *Third term.*

(c.) *Histology.*

Lectures three times a week. Laboratory work four hours a week. *First and second terms.*

(d.) *Embryology.*

Lectures three times a week on general embryology. Laboratory work on the development of the chick, four hours a week. *Third term.*

(e.) *Advanced Zoology.*

Reading and laboratory work, eight hours a week. *Throughout the year.*

IV. (a.) *Structural Entomology.*

Lectures three times a week. Laboratory work four hours a week. *First term.*

(b.) *Systematic Entomology.*

Lectures three times a week. Laboratory work four hours a week. *Second and third terms.*

(c.) *Economic Entomology.*

Reading and laboratory and field work. *Throughout the year.*

V. (a.) *General Horticulture.*

Lectures three times a week. Laboratory and field work four hours a week. *Throughout the year.*

(b.) *Practical Horticulture.*

Reading and experimental work. *Throughout the year.*

VI. (a.) *Geology.*

Lectures three times a week. Laboratory and field work four hours a week. *Throughout the year.*

## ENGLISH AND MODERN LANGUAGES.

R. H. WILLIS, Professor.

ELLA CARNALL, Adjunct Professor.

The subjects taught for undergraduates are the English (including Anglo-Saxon), German, French and Spanish languages and their histories and literature. Italian will also be taught for music students and others, when the demand is sufficient.

In the lower classes for each language the aim is to acquire a practical and accurate use of the language as it exists today; and the only proper basis for this is an exact knowledge of grammatical forms and of the elementary principles of syntax. In the higher classes the languages are studied historically and philologically with a view to general culture and to the best mental discipline.

Every student has the opportunity to become thoroughly acquainted with the English language, to learn to speak it and to write it correctly and forcibly. In the foreign languages the first and constant aim is a correct pronunciation and excellence in translation and composition; but the syntactical and etymological relations existing between these languages and the English are emphasized, and they are thus constantly contributing to the student's knowledge of English and to his power of expression. Besides the above instruction there will be in 1892, in each foreign language, additional recitations devoted wholly to conversation and sight reading.

Spanish takes the place of French for any beginning class which desires this substitution; but both these languages may be taught the same year, if there are as many as five students desiring to begin each in the Freshman class.

The following are the courses for 1892:

I. *Rhetoric and English Classics (Freshman).*

Raub's Rhetoric (two terms) and Macaulay's Essay on Milton (third term); twelve essays (chiefly narrative and descriptive) criticised and corrected by the instructor and copied by the student; thorough drill in English metres. For reference: Bain, Bardeen, Blair, Clark, Hart, Hill, Genung, Kames. *Three times a week.*



II. *English and American Literature (Junior and Senior).*

- (a.) History of English and American Literature from earliest period to present day. Stopford Brooke's Primer with parallel reading of authors, and references to Taine, Morley, Shaw, Arnold, Minto, and others. *Once a week.*
- (b.) English masterpieces read and critically studied; historical and critical essays. Kitchin's Spenser; Hale's Longer English Poems and Clarendon Press editions. *Twice a week.*
- (c.) Chaucer and Shakespeare read and critically studied. Morris's Chaucer; Hudson's or Rolfe's Plays of Shakespeare; critical and historical essays. *Once a week.*

III. *Early English and Philology (Senior and Graduate).*

- (a.) Anglo-Saxon and Middle English; Anglo-Saxon Grammar and readings from the Gospels and Chronicle; selections from Alfred, Ælfric, Caedmon, and from Beowulf and Judith; Sweet's Anglo-Saxon Primer and Sweet's Reader, or Bright's Reader; Morris's Selections from Middle English, Part I; Long's Early English Literature. For reference: Baskerville & Harrison's (or Bosworth's) Anglo-Saxon Dictionary; Cook's Siever's Grammar of Old English; Ten Brink's Old English Literature; March's Anglo-Saxon Grammar. *Three times a week.*
- (b.) English Philology. Lounsbury's History of the English Language with references and lectures. For reference: Skeat's Etymological Dictionary, Earle, Whitney, Max Muller and Marsh. *Once a week.*

IV. *Advanced Anglo-Saxon and English Philology (Graduate).*

Cook's Siever's Grammar; March's Grammar; Critical Study of Alfred's Orosius, of Andreas, of Beowulf, of Caedmon's Genesis, and of Judith; Ten Brink's O. E. Literature; English Philology. For reference same as IV. *At the convenience of the professor.*

V. *Gothic and Germanic Philology (Graduate).*

Skeat's Gospel of St. Mark in Gothic with grammar; Balg's Translation of Braune's Gotische Grammatik; Heyne's Ulfilas; Douse's Introduction to the Gothic of Ulfilas; Balg's Comparative Glossary of Gothic. *At the professor's convenience.*

VI. *Modern English Literature (Graduate).*

Critical study of the life and works of Scott, Byron, Burke, Carlyle, Thackeray, and Tennyson. *At the professor's convenience.*

VII. *American Literature (Graduate).*

Critical study of the life and works of Irving, Poe, Longfellow, Emerson, Hawthorne, and Sidney Lanier. *At the professor's convenience.*

VIII. *Modern German, Elementary (Junior).*

The Joynes-Meissner Grammar with composition; Brandt's Reader, containing selections from the simple prose of Grimm, Niebuhr, and other authors, and from the lyrics of Goethe, Schiller, Heine, Uhland and other poets; five lyric gems memorized; sight reading. *Four times a week.*

IX. *Classic German (Senior).*

The critical study of German classics; Schiller's Maria Stuart; Lessing's Nathan der Weise; selections from the prose of Raumer and of Goethe, from Hermann and Dorothea and from Faust; grammar and composition continued; original composition; Conant's German Literature with references to Gostwick and Harrison's Literature and to other larger works. For reference: Whitney's and Brandt's Grammars; Heath's Dictionary. *Four times a week.*

X. *German at Sight and German Conversation (Senior).*

Grimm's and Andersen's Maerchen; Hoffman's Tales from History; Schiller's Der Neffe als Onkel; Dreyspring's First Reader; Heness' Der Sprechlehrer. *Twice a week.*

XI. *Graduate Courses in German.*

One of the following courses of one year each may be taken at the professor's convenience: (1) Life and works of Goethe, (2) of Schiller, (3) of Lessing, (4) Old and Middle High German, (5) Gothic and Comparative Philology.

XII. *Modern French, Elementary (Freshman and Sophomore).*

Edgren's Grammar with composition; Super's Reader, containing simple prose tales and extended selections from Daudet, Dumas, Erckmann-Chatrian, Xavier De Maistre and a few lyrics from Victor Hugo, Beranger, Emile Souvestre and other poets; sight reading. *Four times a week.*

XIII. *Classic French (Sophomore).*

The critical study of French classics: Corneille's *Le Cid*; Racine's *Athalie*; Moliere's *Les Femmes Savantes*; grammar and composition continued; Saintsbury's *Primer of French Literature* with reference to his larger work. For reference: Whitney's *Grammar*; Harrison's *French Syntax*; Brachet's *Historical Grammar*; Heath's *French Dictionary*. *Four times a week.*

XIV. *French at Sight and French Conversation (Sophomore).*

Easy modern French; Fenelon's *Telemaque*; Corneille's *Cinna*. *Twice a week.*

XV. *Graduate Courses in French.*

One of the following courses of one year each may be taken at the professor's convenience: (1) *Life and Works of Moliere*, (2) of *Corneille and Racine*, (3) of *Voltaire*, (4) of *Victor Hugo*, (5) *Old French*.

XVI. *Modern Spanish, Elementary (Freshman).*

Edgren's *Spanish Grammar* with composition; Worman's *First and Second Spanish Books*; Knapp's *Spanish Readings*, containing extracts from Fernan Caballero, Burgos, Castelar and other authors; sight reading. *Four times a week.*

XVII. *Classic Spanish (Sophomore).*

The critical study of Spanish classics: Selections from *Don Quixote*; Lope's *La Estrella de Sevilla*; Calderon's *El Principe Constante*; *Spanish Literature*; grammar and composition continued. For reference: Knapp's *Grammar*; Becker's *Spanish Idioms*; Smith's *Grammatica Practica de la Lengua Castellana*; Sismondi's *Literature*; Seoane's *Dictionary*. *Four times a week.*

XVIII. *Italian.*

Grandgent's *Grammar* with composition; Foresti's *Reader*; Manzoni's *I Promessi Sposi*; Tasso's *Gerusalemme Liberata*; *Italian Literature*. For reference: Cuore's *Grammar*; Sismondi's *Literature*; Baret's *Dictionary*. *At the professor's convenience.*

## DEPARTMENT OF ANCIENT LANGUAGES.

C. H. LEVERETT, Professor.

The subjects taught in this department are the Latin Language and Literature and the History of Rome, the Greek Language and Literature and the History of Greece. Authors are read in the order of their difficulty, and neat written translations are required at stated intervals. The grammar and idioms of these languages are carefully studied and compared with those of English and other languages.

Marked attention is paid to the rendering of English into Latin and Greek. In the lower classes the best manuals for Latin and Greek composition are used; for the higher classes carefully graded exercises are prepared by the professor.

Due prominence is given to the study of Latin and Greek metres and to sight-reading. The grammars are made the basis of this instruction, but fuller explanation is given in lectures.

I. (a.) *Cæsar (Freshman).*

Two books of Cæsar (Greenough), or thirty-five pages of Nepos (Chase and Stewart). *First term, four times a week.*

NOTE.—The Continental pronunciation of Latin used.

(b.) *Virgil's Æneid (Freshman).*

Two books of Virgil's Æneid (Greenough.) *Second term, four times a week.*

(c.) *Virgil's Æneid and Eclogues (Freshman).*

One book of the Æneid and selections from the Eclogues. Smith's Smaller History of Rome. *Third term, four times a week.*

NOTE.—(1.) Gildersleeve's Grammar is used throughout the course in Latin.

(2.) Jones' Latin Prose Composition is used during the Freshman Sophomore and Junior years.

II. (a.) *Cicero's Orations (Sophomore).*

Fifty pages of Cicero's Orations (Harkness). *First term, four times a week.*

(b.) *Horace's Odes (Sophomore).*MacLeane's Horace. *Second term, four times a week.*(c.) *Livy (Sophomore).*Fifty pages of Lincoln's Livy. *Third term, four times a week.*III. (a.) *Livy (Junior).*Sixty pages of Livy. *First term, four times a week.*(b.) *Horace (Junior).*Fifteen hundred lines of the Satires and Epistles of Horace.  
*Second term, four times a week.*(c.) *Tacitus (Junior).*One hundred pages of Tacitus. *Third term, four times a week.*IV. (a.) *Cicero (Senior).*The Moral Works of Cicero. *First term, four times a week.*(b.) *Juvenal (Senior).*Leverett's or MacLeane's Juvenal. *Second term, four times a week.*(c.) *Roman Literature (Senior).**Third term, four times a week.*

NOTE.—(1.) Original exercises in Latin prose composition will be required throughout the year.

(2.) Other authors may occasionally be substituted for those above when a change seems beneficial: *e. g.*, Sallust, Ovid, Catullus, Tibullus, Propertius, Pliny, Plautus, Terentius.

BOOKS OF REFERENCE.—Harper's Latin-English Lexicon, White's English-Latin Lexicon, Classical Dictionary, Classical Atlas and Zumpt's, Madvig's and Roby's Latin Grammars.

V. *Graduate Courses in Latin.*

One or two of the following courses of one year each are offered to graduate students for 1892: (1) The complete works and the life of Virgil and Lucretius, (2) of Sallust and Tacitus, (3) of Livy, (4) of Catullus, Tibullus, Propertius and Ovid, (5) of Cicero, (6) of Terence, Plautus and early authors, (7) of Seneca and Quintilian, (8) of Suetonius and Pliny the Younger. With each of these courses there is collateral work in history, archæology, etc.



VI. (a.) *Greek (Freshman).*

Goodwin's Grammar, White's Lessons. *First term, four times a week.*

(b.) *Greek (Freshman).*

Goodwin's Grammar, White's Lessons. *Second term, four times a week.*

(c.) *Xenophon's Anabasis (Freshman).*

Six chapters of Xenophon's Anabasis, Goodwin. *Third term, four times a week.*

NOTE.—Goodwin's Grammar is used throughout this course.

VII (a.) *Xenophon's Anabasis and Prose Composition (Sophomore).*

One book of Xenophon's Anabasis. *First term, four times a week.*

(b.) *Xenophon's Anabasis (Sophomore).*

Two books of Xenophon's Anabasis. *Second term, four times a week.*

(c.) *Lysias and Grecian History (Sophomore).*

Three orations of Lysias and the History of Greece. *Third term, four times a week.*

NOTE.—Jones' Prose Composition is used throughout the Sophomore and Junior years.

VIII. (a.) *Herodotus (Junior).*

Forty pages of Herodotus (Mather). *First term, four times a week.*

(b.) *Homer's Iliad (Junior).*

Three books of Homer's Iliad (Pratt and Leaf). *Second term, four times a week.*

(c.) *Demosthenes, Plato (Junior).*

Forty pages of Demosthenes, selections from Plato. *Third term, four times a week.*

IX. (a.) *Thucydides (Senior).*

One book of Thucydides. *First term, four times a week.*

(b.) *Euripides, Sophocles (Senior).*

One play of Euripides, one play of Sophocles. *Second term, four times a week.*

(c.) *Sophocles, Greek Literature (Senior).*

One play of Sophocles, Greek Literature. *Third term, four times a week.*

NOTE.—(1.) Original exercises in Greek composition are required during the Senior year.

(2.) Other authors may be substituted for those given.

BOOKS OF REFERENCE.—Liddell and Scott's Greek-English Lexicon (7th Oxford Edition), Yonge's English-Greek Lexicon, Classical Dictionary, Classical Atlas, Goodwin's Moods and Tenses, Hadley's and Curtius' Grammars.

## X. *Graduate Courses in Greek.*

One or two of the following courses of one year each are offered to graduate students for 1892: (1) The life and complete works of (1) Sophocles and Æschylus, (2) of Euripides, (3) of Aristophanes, (4) of Homer, (5) of Herodotus and Thucydides, (6) of Demosthenes, (7) of Plato, one-half of his works; (8) of Aristotle, one-half of his works. With each of these courses there is collateral work in history, archæology, etc.

## DEPARTMENT OF HISTORY AND PEDAGOGICS.

J. F. HOWELL, Professor.

### I. *History (Sophomore).*

Myers' General History (two terms) and Montgomery's English History (third term) with helpful books for parallel reading; twelve historical essays (expository, argumentative or persuasive). For reference: The Student's series of Histories and the standard historians in the library. *Four times a week.*

### II. *Advanced Ancient History (Graduate).*

Smith's Ancient History of the East, Smith's History of Greece, Merivale's History of Rome, the Student's Gibbon.

### III. *Advanced Modern History (Graduate).*

Lodge's History of Modern Europe, Jervis' History of France, Green's Short History of the English People, Lewis' History of Germany.

### IV. *Pedagogy (Freshman).*

White's Pedagogy. *Twice a week.*

### V. *School Management (Sophomore).*

Baldwin's School Management. *First term, four times a week.*

### VI. *History of Education (Sophomore).*

Painter's History of Education. *Second term, three times a week.*

VII. *Science of Education (Sophomore).*

Palmer's Science of Education. *Third term, four times a week.*

VIII. *School Law (Sophomore).*

Lectures on General School Law, and the Organic School Law of Arkansas. *Third term, three times a week.*

NOTE.—The Normal course is accompanied throughout by notes and lectures. A considerable amount of collateral reading is required.

## MILITARY DEPARTMENT.

ROBT. W. DOWDY, 1st Lieut. 17th U. S. Infantry,  
*Professor of Military Science and Tactics.*

This department is in charge of the United States Army officer detailed by the War Department for duty at the Arkansas Industrial University.

The male students of the University are required to drill because the act of Congress appropriating lands to establish the University provides that the leading branches taught shall be "Military Science and Tactics," in addition to the usual course of study prescribed in universities.

The system of drill used closely follows that in the United States Army. It contains a course of gymnastic exercises for the development and improvement of the arms, chest, legs, hands and feet, which is unexcelled.

Besides being the perfection of physical training it has many advantages mentally. The necessity of being alert, listening for each word of command and acting promptly on it quickens the wit and cultivates the habit of fixing the attention and concentrating the thoughts. Thus the student is improved mentally and physically by every drill.

One hour per week is devoted to theoretical instruction in the art and science of war, and three hours per week to practical instruction in the school of the soldier, of the company and of the battalion, including such ceremonies as guard mounting, dress parade, etc.

The battalion of cadets consists of all the able-bodied cadets over the age of 15, and is officered by cadets selected for pro-

ficiency in drill and general good conduct. Two of the companies have recently been mustered into the service of the State as Companies "A" and "B," First Regiment Arkansas State Guards; but no cadet will be allowed to become a member of either of these companies of the State Guards if his parent or guardian objects.

A competitive drill is held yearly, and the successful company wins the honor of carrying the colors for the ensuing year. A gold medal offered for the best drilled cadet last year was won by Cadet J. F. Moore.

A neat uniform of gray cloth, with brass buttons and black trimmings is required to be worn at all drills. The suit complete costs from \$14 to \$18, and with ordinary care will last a year, being cheaper in the end than clothing ordinarily worn by students.

Parents will save money by postponing the purchase of suits for their sons until they arrive at Fayetteville.

#### IMPORTANT.

The three students of the Senior class having the highest grade of merit in this department will be reported to the Secretary of War, and by him reported in the Army and Navy Register for that year, preference being given to those so reported in selecting officers for vacancies in the United States Army.

Roster of officers and non-commissioned officers of the Arkansas Industrial University battalion, 1891 :

Colonel.....	DeR. C. Cabell (1st Lieut., 8th U. S. Cavalry)
Adjutant.....	C. C. Patton
Sergeant Major.....	J. D. Arbuckle
Drum Major.....	A. J. Newman

#### COMPANY "A" (COLOR COMPANY).

Captain.....	S. A. Horton
First Lieutenant.....	S. F. Vaulx
Second Lieutenant.....	J. S. Pharr
Third Lieutenant.....	W. A. Crawford
First Sergeant.....	C. F. Armistead
Sergeant.....	I. G. Hedrick (Color Sergeant)
Sergeant.....	L. R. Ash

Sergeant.....	A. M. Vance
Sergeant.....	J. H. Moore
Corporal.....	J. C. Purdy
Corporal.....	J. O. Rawlings

## COMPANY "B."

Captain.....	G. V. Skelton
First Lieutenant.....	H. B. Shreve
Second Lieutenant.....	A. C. Wood
Third Lieutenant.....	G. H. Kimball
First Sergeant.....	O. P. Brewer
Sergeant.....	C. E. Hall
Sergeant.....	J. F. Moore
Sergeant.....	H. Pharr
Sergeant.....	C. Hollis
Corporal.....	T. R. Spears
Corporal.....	C. A. Humphry



# MUSICAL DEPARTMENT.

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J. B. MARCHESELLI, *Director.*

## PIANO FORTE.

### FIRST GRADE.

Elementary lessons in notation reading, position of person and hands, and practical piano lessons.

First Book New England Conservatory Method, technical exercises, Diabelli's First Steps and Koehler's Op. 50 and 60.

### SECOND GRADE.

Duvernoy's Ecole du Mechanism, Clementi's Sonatinas, Heller's Op. 46, and Czerny's School of Velocity.

### THIRD GRADE.

Czerny's Op. 740, Bertini's Op. 29 and 32, Heller's Art of Phrasing, and Liebert and Stark's Third Book.

### FOURTH GRADE.

Heller's Art of Phrasing, Moscheles' Op. 73, Bach's Inventions and Clementi's Gradus ad Parnassum.

### FIFTH GRADE.

Bach's 48 Preludes and Fugues, Chopin's Op. 25, Berger's Op. 22, Cramar's Finishing Studies.

The study of Theory and Harmony begins with the second grade. Pupils will receive a certificate on the completion of each grade, and a diploma when the entire course is finished.

## VOCAL.

### FIRST GRADE.

For Soprano, Mezzo-Soprano and Tenor, Bassini's Art of Singing and Vocalization. For Contralto, Marchesi's Op. 5. For Bass and Baritone, Barker's Vocal Exercises.

## SECOND GRADE.

For Soprano, Mezzo-Soprano and Tenor, Concone's Op. 9 and 11. For Bass, Lablache's Method, Parts III and IV. For Baritone, Marchesi's Op. 15. Classical selections are studied in this grade.

## VIOLIN.

## FIRST GRADE.

Henning's Practical School, Parts I and II, and Dancla's Op. 89.

## SECOND GRADE.

David's Method, Part II, and studies in solo playing.

## TERMS:

Twelve weeks—two lessons per week.

Vocal Culture .....	\$12 50
Piano-forte and Organ .....	12 00
Violin and other stringed instruments.....	12 00
Cornet and other brass instruments.....	12 00
Clarinet and Flute.....	12 00
Thorough Bass and Harmony.....	5 00
Use of Piano one hour every day.....	2 35

Tuition payable in advance.

No deduction will be made on account of absence from recitations except in case of prolonged sickness.

## POST GRADUATE COURSES

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### REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS (M. A.)

Applicants for this degree must have previously taken the Degree of B. A., and in addition must take at the University, for a full scholastic year, four daily studies appointed by the Faculty, and submit a satisfactory thesis.

### REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE (M. S.)

Applicants for this degree must have previously taken the Degree of B. S., and in addition must take at the University, for a full scholastic year, four daily studies appointed by the Faculty, and submit a satisfactory thesis.

### REQUIREMENTS FOR THE DEGREE OF M. E. OR C. E.

The Degree of M. E. or C. E. will be given after three years to those graduates of the Mechanical or Civil Engineering courses, who by successful practice prove themselves worthy and submit a satisfactory thesis.

### REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY. (PH. D.)

1. This degree will be conferred for distinguished attainments, as shown by examination and thesis, in any one of the five following languages: Latin, Greek, German, French and English, together with subordinate attainments in two others of the five; or for distinguished attainments in one principal, and two subordinate, of the following sciences: Chemistry, Physics, Geology, Biology; or for distinguished attainments in Philosophy, or in Pure and Applied Mathematics.

2. This degree shall be open to persons who have received the Degree of B. A. or B. S. at this or other reputable institutions.

3. No applicant shall be admitted to examination for this degree before two full scholastic years from the date of his

admission to the course shall have passed. The last of these two years must be passed by the candidate in resident study at the University.

4. Applicants for this degree must state in their application what particular line of study they wish to pursue.

5. A thesis of 2000 or more words showing original research shall be required of every applicant, the subject of which shall be announced and passed upon by a committee of the Faculty at least one year before the time set for the final examination, and the thesis itself must be presented to the committee two months before admission to the examination. Twenty-five copies of the approved and printed thesis shall be placed in the University library.

6. All applicants for this degree, who have previously taken the B. S. or M. S. Degree, must, by the end of the first year of the course, be sufficiently conversant with French and German to read with ease any scientific work written in these languages.

7. The fee for examination of applicants for the Degree of Ph. D. is \$35; for the M. A. or M. S. Degree, \$25, and for each Diploma, \$5. The thesis is printed at the expense of the candidate.

## THE SCHOOL OF AGRICULTURE.

### FACULTY.

A. E. MENKE, Professor of Chemistry.

JEROME MCNEIL, Professor of Biology and Geology.

O. C. GRAY, Professor of Mathematics.

R. W. DOWDY, Professor of Military Science and Tactics.

R. H. WILLIS, Professor of English.

W. B. BENTLEY, Adjunct Professor of Chemistry.

R. R. DINWIDDIE, Veterinarian of the Agricultural Experiment Station.

W. F. BATES, Foreman of the Farm.

J. M. MOORE, Assistant Foreman of the Farm.

(REQUIREMENTS FOR ADMISSION.)

(See Pages 36-40).

### GENERAL STATEMENT.

The School of Agriculture is designed and organized to give both theoretical and practical instruction in the various

branches of agriculture. The farmers have realized that there is no art, profession or occupation which demands more careful study than agriculture; that special preparation is needed no less for the pursuit of agriculture than for law, medicine or divinity, and that proper provision should be made for teaching so important a subject in the State University. It is the policy of the present management to unite practice with theory, under the belief that in no other way beneficial results can be obtained. The equipments for practical work will compare favorably with those of any other successful agricultural college. The agricultural machinery on hand is of the newest and most approved pattern. In addition to the ordinary implements, we have a Victor manure spreader; rear-pressure shoe drill; Aspinwall potato planter, with corn and fertilizer attachments; disc harrow, etc. The use of all this machinery is to give the student an insight into labor-saving devices, with a view to their economic employment. We have two commodious barns that will accommodate forty-one head of stock, machinery, feed, etc. There has also been recently constructed a fine dairy and ice-house, built in accordance with tested plans. On the farm the student can become acquainted with the telling points of good stock, as he can see specimens of pure Devons, Holsteins, Sussex, Jerseys, Herefords, Gallo-ways, grade Durhams, etc. We have a large vineyard and orchard for practical horticultural work. The students are interested in and do all the practical work that occurs on either a stock, dairy, fruit or cropped farm. The purely agricultural classes in the course are Agriculture, Horticulture, Stock Breeding, Stock Feeding, Agricultural Chemistry, Veterinary Anatomy, Veterinary Science, Dairying. The various closely-related branches are also provided for, as may be seen in the schedule. The following is a more detailed description of the instruction given in the different classes:

#### DAIRYING.

The new dairy has been fitted up with a Laval separator and all the most modern appliances. A specialty will be made of



this branch of agricultural science, and the attention of farmers is called to the desirability of their sons and daughters gaining all attainable information on this subject.

#### FARMER'S COURSE FOR CERTIFICATE IN AGRICULTURE.

##### FRESHMAN YEAR.

Biology, 3; Physics, 4; English, 3; Mathematics 5.

##### SOPHOMORE YEAR.

###### FIRST TERM.

Veterinary Anatomy, 5.

Horticulture, 4.

Stock Breeding, 3.

General Chemistry, 3.

###### SECOND TERM.

Veterinary Science, 3.

Agriculture, 2.

Dairy Husbandry, 4.

Stock Breeding, 3.

General Chemistry, 3.

###### THIRD TERM.

Veterinary Science, 2.

Agriculture, 1.

Dairy Husbandry, 4.

Stock Breeding, 3.

General Chemistry, 5.

Students who have completed this course may take the Junior and Senior years in the College of Science and graduate with the Degree of Bachelor of Science.

#### AGRICULTURAL JOURNALS.

We believe that the mind is strengthened by the intelligent perusal of good papers, and also that the farmer who reads the best agricultural papers will be able to intelligently realize the experience of others. We keep the following list of papers on file for the benefit of agricultural students in particular :

*Arkansas Farmer*, Little Rock, Ark.

*Arkansas Stockman*, Little Rock, Ark.

*Breeder's Gazette*, Chicago, Ill.

*Farmer's Review*, Chicago, Ill.

*American Farmer*, Baltimore, Md.

*Southern Cultivator*, Atlanta, Ga.

*Prairie Farmer*, Chicago, Ill.

*Texas Stockman*, San Antonio, Texas.

*Breeder's Journal*, Beecher, Ill.

*Grange Bulletin*, Cincinnati, Ohio.

*Rural World*, St. Louis, Mo.

*Journal of Agriculture*, St. Louis, Mo.

*Industrialist*, Manhattan, Kan.

*Country Gentleman*, Albany, N. Y.

*Canadian Entomologist*, Toronto, Ont.

*Kentucky Stock Farm*, Lexington, Ky.

*Live Stock Journal*, London, England.

*Chemical Society's Journal*, London, England.

*Royal Agricultural Society's Journal*, London, England.

*Home and Farm*, Springfield, Mass.

*Western Resources*, Omaha, Neb.

The majority of the above journals are donated by their respective publishers, to whom we are very thankful.

## SCHOOL OF MECHANIC ARTS AND ENGINEERING.

### FACULTY.

E. H. MURFEE, President and Professor of Psychology and Ethics.

C. V. KERR, Professor of Engineering.

O. C. GRAY, Professor of Mathematics.

A. E. MENKE, Professor of Chemistry and Physics.

R. H. WILLIS, Professor of English and Modern Languages.

JEROME MCNEILL, Professor of Biology and Geology.

J. F. HOWELL, Professor of History and Pedagogics.

R. W. DOWDY, Professor of Military Science and Tactics.

G. C. SCHOFF, Adjunct Professor of Civil Engineering.

H. B. SMITH, Adjunct Professor of Electrical Engineering.

W. B. BENTLEY, Adjunct Professor of Chemistry.

G. W. DROKE, Adjunct Professor of Mathematics.

ELLA CARNALL, Adjunct Professor of English.

S. E. MEEK, Adjunct Professor of Biology and Geology.

S. L. GRINSTEAD, Instructor in Wood Working.

WM. M. GILMORE, Instructor in Foundry and Forging.

MACK MARTIN, Instructor in Machine Shop.

JESSIE L. CRAVENS, Instructor in Elocution.

WILLARD FRENCH, Engineer.

### REQUIREMENTS FOR ADMISSION.

(See Pages 36-40.)

### GENERAL DESCRIPTION OF COURSES IN ENGINEERING.

MECHANICAL ENGINEERING may be defined as being the application of mathematics to science, with particular reference to the *design and fabrication* of all forms of machinery, and the use of steam and water as motive powers. Since engineering is the combined science and art of utilizing the forces and materials of nature, and since this utilization is accomplished in nearly all cases by machines, or by processes work-

ing through machines, it is evident that *mechanical engineering is the basis of all art and industry.*

CIVIL ENGINEERING embraces the location and construction of railroads, canals, waterworks, sewerage systems, foundations on land and in water, tunnels and superstructures; the surveys, improvements and defenses of coasts, harbors, rivers and lakes; the application of mechanics, descriptive geometry and graphics to the design and construction of arch bridges, roofs, truss and suspension bridges; irrigation and drainage of lands; and the preparation of forms of specifications and contracts.

ELECTRICAL ENGINEERING deals with the design and construction of dynamos and motors; the distribution of electricity for use in illumination, or for driving machinery; the construction and operation of electric railways; the erection and management of telegraph and telephone lines, and with the electrolysis or welding of metals.

The courses in engineering offered are designed to supply not only mental training but the means for insuring a livelihood in the professions to which they lead. It is believed that the most efficient way to teach theory is to unfold it to the student only so fast as he can apply it to the practical work of his course. He thus makes it his own, and theory becomes practice.

### COURSE IN MANUAL TRAINING.

The Course in Manual Training, covering four years, is intended to replace the old apprenticeship system, and, at the same time, give the youth instruction in English, mathematics, science, drawing, the principles of mechanism and steam engineering. The recent growth of Manual Training Schools, not only here, but in Europe, is phenomenal. The apprenticeship system is now practically obsolete; hence the need of Manual Training Schools. The only opportunity offered to the youth of the State to obtain this instruction is given by the University, whose equipment and work of instruction has been so planned that we are able to offer:

(a.) A course in general shop work, extending over three years, followed by a fourth year's work in one of the shops selected by the student. The design is to enable a young man to acquire considerable skill and a sound basis for the trade he may want to follow.

(b.) A course in general shop work, extending over three years, followed by a fourth year's work in the management of boilers, engines, dynamos and electric light systems. This course is intended to train young men for the practical work of running steam plants or electric light stations.

(c.) A course in general shop work extending over three years, together with class room work in the history, theory and practice of teaching, followed by a fourth year's work in handling classes in the shops and in laying out series of practical exercises. Shop instructors really qualified for their work are hard to find, and the course is an attempt to provide a means for training young men for such work in our own institution and in other schools where manual training is in practice.

#### FRESHMAN CLASS.

*First Term*—Algebra, 5; English, 3; Physics, 4; Machine Shop Practice, 2; Drawing, 1; Shop Work, 2; Physical Laboratory, 1.

(c.) Pedagogy, 2.

*Second Term*—Geometry, 5; Rhetoric, 3; Physics, 4; Machine Shop Practice, 2; Drawing, 1; Shop Work, 2; Physical Laboratory, 1.

(c.) Pedagogy, 2.

*Third Term*—Plane Trigonometry, 5; Rhetoric, 3; Physics, 4; Machine Shop Practice, 2; Drawing, 1; Shop Work, 2; Physical Laboratory, 1.

(c.) Pedagogy, 2.

#### SOPHOMORE CLASS.

*First Term*—General History, 4; General Chemistry, 3; Chemical Laboratory, 2.

(a.) Elements of Mechanism, 2; Drawing, 2; Shop Work, 2.

(b.) Steam Engines, 3; Management of Boilers, etc., 3.

(c.) School Management, 4; History of Manual Training, 1; Shop Teaching, 3.

*Second Term*—Elementary Mechanics, 3; General Chemistry, 3; Chemical Laboratory, 2; General History, 4.

(a.) Machinery and Mill Work, 2; Drawing, 1; Shop Work, 2.

(b.) Steam Engines and Pumps, 3; Management of Boilers, etc., 3.

(c.) History of Education, 3; History of Manual Training, 1; Shop Teaching, 3.

*Third Term*—Masonry Construction, 3; General Chemistry, 5; Chemical Laboratory, 2.

(a.) Machinery and Mill Work, 2; Drawing, 2; Shop Work, 2.

(b.) Boilers, 3; Management of Boilers, etc., 3.

(c.) Science of Education, 4; Shop Organization, 2; Shop Teaching, 3; Civil Government, 3; School Law, 3. Omit General Chemistry and Chemical Laboratory.

NOTE—Students take the required studies, and those in courses (a), (b) or (c), according to the work for which they wish to fit themselves.

NOTE—On completing this course, students receive an appropriate degree.

## CIVIL, MECHANICAL AND ELECTRICAL ENGINEERING.

### FRESHMAN CLASS.

*First Term*—Algebra, 5; Rhetoric, 3; Physics, 4; Machine Shop Practice, 2; Physical Laboratory, 1; Drawing, 1; Shop Work, 2.

*Second Term*—Solid Geometry, 5; Rhetoric, 3; Physics, 4; Machine Shop Practice, 2; Physical Laboratory, 1; Drawing, 1; Shop Work, 2.

*Third Term*—Trigonometry, 5; Rhetoric, 3; Physics, 4; Machine Shop Practice, 2; Physical Laboratory, 1; Drawing, 1; Shop Work, 2.

### SOPHOMORE CLASS.

*First Term*—Trigonometry, 5; General Chemistry, 3; Heat, 2; Surveying, 3; Chemical Laboratory, 2; Physical Laboratory, 1; Surveying Practice, 1; Drawing, 1.

*Second Term*—Analytical Geometry, 5; General Chemistry, 3; Heat, 2; Surveying, 3; Chemical Laboratory, 2; Physical Laboratory, 1; Surveying Practice, 1; Drawing, 1.

*Third Term*—Differential Calculus, 5; General Chemistry, 5; Heat, 2; Surveying, 2; Chemical Laboratory, 2; Physical Laboratory, 1; Surveying Practice, 1; Drawing, 1.

## CIVIL ENGINEERING COURSE FOR DEGREE OF B. C. E.

### JUNIOR CLASS.

*First Term*—Differential Calculus, 5; Steam Engineering, 3; Geology, 3; Railroad Engineering, 3; Surveying Practice, 3; Drawing 1.

*Second Term*—Integral Calculus, 5; Steam Engineering, 3; Geology, 3; Railroad Engineering, 2; Surveying Practice, 2; Drawing, 1; Elementary Mechanics, 3.

*Third Term*—Analytical Mechanics, 5; Geology, 3; Masonry Construction, 3; Steam Engineering, 3; Surveying Practice, 3; Drawing, 1.

### SENIOR CLASS.

*First Term*—Strength of Materials, 4; Metallurgy of Iron and Steel, 3; Astronomy, 4; Arches and Dams, 3; Surveying Practice, 1; Drawing, 1; Engineering Laboratory, 2.

*Second Term*—Hydraulics, 4; Stereotomy, 2; Sanitary Engineering, 3; Bridges, 3; Waterworks, 2; Surveying Practice, 2; Drawing, 2.

*Third Term*—Waterworks, 3; Bridges, 4; Engineering Structures, Specifications, 3; Law of Contracts, Patent Law, 3; Thesis Work, 5.



## MECHANICAL ENGINEERING COURSE FOR DEGREE OF B. M. E.

## JUNIOR CLASS.

*First Term*—Differential Calculus, 5; Analytical Chemistry, 5; Steam Engineering, 3; Elements of Mechanism, 2; Chemical Laboratory, 2; Drawing 2.

*Second Term*—Integral Calculus, 5; Elementary Mechanics, 3; Steam Engineering, 3; Machinery and Millwork, 2; Chemical Laboratory, 2; Drawing, 2.

*Third Term*—Analytical Mechanism, 5; Machinery and Millwork, 2; Steam Engineering, 3; Masonry Construction, 3; Chemical Laboratory, 2; Drawing, 2; Indicator Practice, 1.

## SENIOR CLASS.

*First Term*—Thermodynamics, 3; Locomotive Engineering, 2; Strength of Materials, 4; Metallurgy of Iron and Steel, 3; Balance of Reciprocating Parts, 2; Drawing, 2; Engineering Laboratory, 2.

*Second Term*—Thermodynamics, 3; Theory of Compounding, 2; Valve Gears and Governors, 3; Engineering Tests, 2; Hydraulics, 4; Drawing, 2; Engineering Laboratory, 2.

*Third Term*—Thermodynamics, 3; Turbines, 4; Power Plants, Specifications, 3; Laws of Contracts, Patent Law, 3; Thesis Work, 5.

## ELECTRICAL ENGINEERING COURSE FOR DEGREE OF B. E. E.

## JUNIOR YEAR.

*First Term*—Differential Calculus, 5; Analytical Chemistry, 5; Electricity and Magnetism, 3; Elements of Mechanism, 2; Chemical Laboratory, 2; Electrical Laboratory, 1; Drawing, 2.

*Second Term*—Integral Calculus, 5; Elementary Mechanics, 3; Machinery and Mill Work, 2; Electricity and Magnetism, 3; Chemical Laboratory, 2; Electrical Laboratory, 2; Drawing, 1.

*Third Term*—Analytical Mechanics, 5; Machinery and Mill Work, 2; Electricity and Magnetism, 3; Masonry Construction, 3; Chemical Laboratory, 2; Electrical Laboratory, 2; Drawing, 1.

## SENIOR YEAR.

*First Term*—Dynamo-Electric Machinery, 3; Storage Batteries, 2; Strength of Materials, 4; Metallurgy of Iron and Steel, 3; Engineering Laboratory, 2; Electrical Laboratory, 2; Drawing, 1.

*Second Term*—Dynamo-Electric Machinery, 5; Electric Transmission of Power, 3; Wiring Systems, 2; Hydraulics, 4; Electrical Laboratory, 2; Drawing, 2.

*Third Term*—Dynamo-Electric Machinery, 3; Electric Light and Power Plants, Specifications, 3; Turbines, 4; Laws of Contracts, Patent Law, 3; Thesis Work, 5.

## SCHOOL OF SCIENCE.

## FACULTY.

E. H. MURFEE, President, and Professor of Psychology and Ethics.

A. E. MENKE, Professor of Chemistry and Physics.

JEROME MCNEILL, Professor of Biology and Geology.

R. H. WILLIS, Professor of English and Modern Languages.

O. C. GRAY, Professor of Mathematics and Logic.

C. H. LEVERETT, Professor of Ancient Languages.

J. F. HOWELL, Professor of History and Pedagogics.

C. V. KERR, Professor of Engineering.

R. W. DOWDY, Professor of Military Science and Tactics.

W. B. BENTLEY, Adjunct Professor of Chemistry.

S. E. MEEK, Adjunct Professor of Biology and Geology.

ELLA CARNALL, Adjunct Professor of English.

G. W. DROKE, Adjunct Professor of Mathematics.

G. C. SCHOFF, Adjunct Professor of Civil Engineering.

H. B. SMITH, Adjunct Professor of Electrical Engineering.

JESSIE L. CRAVENS, Instructor in Elocution.

## REQUIREMENTS FOR ADMISSION.

(See pages 36-40.)

## GENERAL STATEMENT.

The design of the courses of study offered by this school is first to afford students a liberal education with some branch of science substituted for Latin or Greek, and second to make some one subject in science so prominent that the graduate will have an excellent foundation for a profession. By requiring every graduate to spend at least three years on one branch of science, as chemistry or botany, he is obliged to go much beyond the easy introduction, which is all that is required in the old-fashioned B. S. course, so that he has the advantage of the severe mental discipline which a difficult study affords, and when this course is completed has the satisfaction of knowing that he is the possessor of special knowledge which can be turned to immediate use if he sees fit.

## COURSE IN CHEMISTRY FOR DEGREE OF BACHELOR OF SCIENCE.

## FRESHMAN YEAR.

Biology, 3; Physics, 4; English, 3; Mathematics, 5.

## SOPHOMORE YEAR.

General Chemistry, 3 for two terms and 5 for third term; General History and Chemical Philosophy, 4; Heat, 2; French, 4; Elective, 2 for two terms.

## JUNIOR YEAR.

Organic Chemistry, 3; Analytical Chemistry, 5 (first term); Mineralogy, 5 (second term); Elective, 5 (third term); Geology, 4; German, 4.

## SENIOR YEAR.

Metallurgy, 3; Technical Chemistry, 3; German, 4; Elective, 5.

## COURSES IN BOTANY AND ZOOLOGY.

These courses are especially designed to meet the needs of those who expect to become teachers of Natural Science in high schools or colleges. They at the same time afford an excellent course for those who expect to study medicine or who wish to do original work in some department of science.

## COURSE IN BOTANY LEADING TO THE DEGREE OF BACHELOR OF SCIENCE.

## FRESHMAN YEAR.

Biology, 3; English, 3; Mathematics, 5; Laboratory Work in Biology; Physics, 4.

## SOPHOMORE YEAR.

Botany, 3; History, 4; Chemistry, 3; Laboratory Work in Botany; Laboratory Work in Chemistry, elective.

## JUNIOR YEAR.

Botany, 3; Zoology, 3; Laboratory Work in Botany; Laboratory Work in Zoology; German, 4, elective.

## SENIOR YEAR.

Geology, 3; German, 4; Laboratory Work in Botany; and Geology, elective.

## COURSE IN ZOOLOGY LEADING TO THE DEGREE OF BACHELOR OF SCIENCE.

## FRESHMAN YEAR.

Biology, 3; English, 3; Mathematics, 5; Laboratory Work in Biology; Physics, 4.

## SOPHOMORE YEAR.

Zoology, 3; History, 4; Chemistry, 3; Laboratory Work in Zoology; Laboratory Work in Chemistry, elective.

## JUNIOR YEAR.

Zoology, 3; Botany, 3; Laboratory Work in Zoology; German, 4.

## SENIOR YEAR.

Geology, 3; German, 4; Laboratory Work in Zoology; and Geology, elective.

## COURSES IN HORTICULTURE AND ENTOMOLOGY.

These courses are intended to train young men or young women for Agricultural Experiment Station work. The establishment of these stations in all of the States has created a strong demand for professional entomologists and horticulturists, and the demand has been and will continue for some years to be greater than the supply.

## COURSE IN HORTICULTURE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE.

## FRESHMAN YEAR.

Biology, 3; English, 3; Mathematics, 5; Laboratory Work in Biology; Physics, 4.

## SOPHOMORE YEAR.

Botany, 3; History, 4; Chemistry, 3; Laboratory Work in Botany, in Chemistry, French or German, 4.

## JUNIOR YEAR.

Horticulture, 3; Entomology, 3; Laboratory Work in Horticulture, in Entomology, French or German, 4.

## SENIOR YEAR.

Geology, 3; Botany, 3; Laboratory Work in Horticulture, in Botany, and in Geology.

## COURSE IN ENTOMOLOGY LEADING TO THE DEGREE OF BACHELOR OF SCIENCE.

## FRESHMAN YEAR.

Biology, 3; English, 3; Mathematics, 5; Laboratory Work in Biology; Physics, 4.

## SOPHOMORE YEAR.

Botany, 3; History, 4; Chemistry, 3; Laboratory Work in Chemistry, Laboratory Work in Botany and Zoology; German or French, 4.

## JUNIOR YEAR.

Entomology, 3; Zoology, 3; Laboratory Work in Entomology; German or French, 4, elective.

## SENIOR YEAR.

Geology, 3; Laboratory or Field Work in Entomology, and in Geology; German or French, 4, elective.

## THE SCHOOL OF LIBERAL ARTS.

## FACULTY.

- E. H. MURFEE, President and Professor of Psychology and Ethics.  
 C. H. LEVERETT, Professor of Ancient Languages.  
 R. H. WILLIS, Professor of English and Modern Languages.  
 O. C. GRAY, Professor of Mathematics and Logic.  
 A. E. MENKE, Professor of Chemistry and Physics.  
 J. F. HOWELL, Professor of History and Pedagogics.  
 JEROME MCNEILL, Professor of Biology and Geology.  
 C. V. KERR, Professor of Engineering.  
 R. W. DOWDY, Professor of Military Science and Tactics.  
 G. W. DROKE, Adjunct Professor of Mathematics.  
 ELLA CARNALL, Adjunct Professor of English and Modern Languages.  
 W. B. BENTLEY, Adjunct Professor of Chemistry and Physics.  
 S. E. MEEK, Adjunct Professor of Biology and Geology.  
 G. C. SCHOFF, Adjunct Professor of Civil Engineering.  
 H. B. SMITH, Adjunct Professor of Electrical Engineering.  
 JESSIE L. CRAVENS, Instructor in Elocution.

## REQUIREMENTS FOR ADMISSION.

(See pages 36-40.)

## CLASSICAL COURSES FOR DEGREE OF BACHELOR OF ARTS (B. A.).

This course is designed to furnish a liberal education, to give special mental discipline, and to prepare students to enter upon professional studies. The course is merely outlined here. For details concerning the studies mentioned consult Departments of Instruction, beginning on page 45.

## COURSE I.

## FRESHMAN YEAR.

Latin, 4; Greek, 4; Mathematics, 5; English, 3.

## SOPHOMORE YEAR.

Latin, 4; Greek, 4; History, 4; Chemistry and English, 3.



## JUNIOR YEAR.

Latin or Greek, 4; English, 4; Logic and Political Economy, 3; Elective, 4.

## SENIOR YEAR.

Physics, 4; Psychology, 3; Latin or Greek, 4; Elective, 4.

## COURSE II.

## FRESHMAN YEAR.

Latin, 4; French or Spanish, 4; Mathematics, 5; English, 3.

## SOPHOMORE YEAR.

Latin, 4; French or Spanish, 4; History, 4; Chemistry and English, 3.

## JUNIOR YEAR.

Latin, 4; German, 4; English, 4; Logic and Political Economy, 3.

## SENIOR YEAR.

Physics, 4; Psychology, 3; English or German, 4; Elective, 4.

Each class has such practical work as the subject requires.

## GRADUATE COURSES FOR HIGHER DEGREES.

For graduate courses see Departments of Instruction, beginning on page 45. For Higher Degrees see pages 66 and 67.

## THE NORMAL SCHOOL.

## FACULTY.

E. H. MURFEE, President and Professor of Psychology and Ethics.

J. F. HOWELL, Professor of History and Pedagogics.

R. H. WILLIS, Professor of English and Modern Languages.

C. H. LEVERETT, Professor of Ancient Languages.

O. C. GRAY, Professor of Mathematics.

A. E. MENKE, Professor of Chemistry and Physics.

R. W. DOWDY, Professor of Military Science and Tactics.

ELLA CARNALL, Adjunct Professor of English and Modern Languages.

W. B. BENTLEY, Adjunct Professor of Physics and Chemistry.

G. W. DROKE, Adjunct Professor of Mathematics.

JESSIE L. CRAVENS, Instructor in Elocution.

## REQUIREMENTS FOR ADMISSION.

(See Pages 36 -40.)

The design of this school is to train teachers for the schools of the State. Technical instruction is begun in the Sub-Freshman, and finished in the Sophomore Class, satisfactory completion of the course entitling the student to a certificate of "Licentiate of Instruction."

The course includes all the branches required for State teacher's license by the school laws of the State, besides some other subjects with which a teacher should be familiar. After completing the normal course, students may take up in the Junior Class the work of any course for which they may be prepared and compete for the corresponding degree.

Psychology is made the basis of technical instruction, an outline of this subject being given in the Freshman Class, and special attention being given to the analysis of the intellectual processes. Students are encouraged and trained to study their own mental phenomena, and to note evidences of similar phenomena in the conduct of others, especially of children. The fundamental principles of teaching as deduced from psychical facts are presented, as also general methods of teaching based on these principles. Students are required to give much attention to principles as inculcated, and to methods as illustrated in approved pedagogical books and journals, a good selection of which is free of access in the University Library. At the same time they are taught to avoid a slavish dependence upon the methods of others, and encouraged to devise plans of their own.

The idea is continually made prominent that character building should be the grand aim of the teacher.

Further, the aims are :

First—To unify the work of our educational system by bringing the secondary schools and the University into close sympathy with each other.

Second—To teach pupils how to organize, grade and discipline the various kinds of schools.

Third—To give them a knowledge of general and Arkansas school law, especially the duties of teachers as officers of the State.

Fourth—To impart to them a valuable summary of the history of education.

Fifth—To aid them in creating for themselves high educational ideals, based on the principles of Christianity.

## NORMAL COURSE LEADING TO THE CERTIFICATE OF LICENTIATE OF INSTRUCTION.

### FRESHMAN YEAR.

Pedagogy, 2 ; Physics, 4 ; Mathematics, 5 ; English, 3 ; Latin, 4.

### SOPHOMORE YEAR.

General Chemistry, 3 (first and second terms) ; Civil Government, 3 (third term) ; General History, 4 ; Science of Education, 4 (third term) ; Latin, 4 ; School Management, 4 (first term) ; History of Education, 3 (second term) ; School law, 3 (third term).

NOTE TO TEACHERS.—The attention of young teachers is called to the course of study on page 60, where it will be observed that instruction is offered in certain lines of pedagogics for periods of three months, thus giving them opportunity to spend their vacations here on such work as they may be competent to do. From March to June methods of teaching may be studied with the Sub-Freshman class, pedagogy, embracing elementary psychology, with the Freshman class, and school management with the Sophomore class. From June to September methods may be studied with the Sub-Freshman, pedagogy with the Freshman and history of education with the Sophomore class. From September to December pedagogy may be studied with the Freshman, and school law and science of education with the Sophomore class. In addition to this technical work, teachers will find superior advantages here in other branches of learning should they desire to spend a vacation in fitting themselves for more thorough and higher work. Correspondence relative to the work of this department is cordially invited.

## UNIVERSITY HIGH SCHOOL.

The High School is intended, first, to prepare students for any of the schools of the University ; second, to furnish to those who cannot take a more extended course as good a general education as the limited time will permit ; third, to give young men and young women an opportunity to obtain a good business education. To secure these ends three courses of study are offered.

### REQUIREMENTS FOR ADMISSION.

1. *Arithmetic*.—Students are examined in Wentworth's Grammar School Arithmetic as far as percentage, and an accurate knowledge of all this is rigidly required. Teachers

preparing pupils for admission should require them to learn principles and definitions accurately and to analyze every example capable of analysis, or should give them thorough drill in mental arithmetic.

2. *English Grammar*.—Harvey's Elementary Grammar and Composition, Part I, with analysis.

3. *Geography*.—The whole of some complete manual of Geography, such as Maury's or Harper's.

4. *Reading*.—Students must be able to understand and to read intelligently specimens from McGuffey's Fifth Reader or from some work equally advanced.

5. *Spelling*.—Of any words contained in McGuffey's Fifth Reader.

#### SPECIMEN EXAMINATIONS FOR ADMISSION TO A CLASS.

Examinations will be of the same general character as the following :

##### I. ARITHMETIC TO PERCENTAGE, 2 HOURS.

1. A boy runs 3.876 miles, dropping a piece of paper every 4.75 feet. How many pieces does he drop ?

*Analysis:* In one mile there are 5280 feet, and in 3.876 miles there are 3.876 times 5280 feet = 20,465.28 feet. If in 4.75 feet he drops 1 piece, in 20,465.28 feet he will drop as many pieces as 4.75 is contained in 20,465.28 feet, which is 4308 papers.

2. Reduce  $\frac{365}{311}$  to its lowest terms.

3. A owns  $\frac{3}{8}$  of a ship worth \$25,748, B  $\frac{1}{4}$  of the remainder, C  $\frac{1}{8}$  of the amount belonging to A and B, and D owns what is still left. What is the value of D's share? Give full analysis.

4. Find cost of papering a room 32 feet long, 22 feet wide, 13 feet high, with paper 18 inches wide, 8 yards in a roll, at \$1.25 a roll, if 50 square yards be allowed for doors, windows and base boards?

5. The longitude of New York is 74° west, that of Paris is 2° 20' east. When it is 15 minutes past 10 a. m. in New York, what is the time in Paris?

##### II. GRAMMAR, 2 HOURS.

1. Name and define all the parts of speech.

2. Name and define all the different kinds of pronouns, all the different kinds of participles, and give an example of each kind.

3. Give three rules for forming the possessive case of nouns, with example of each. What is the possessive case of *conscience*?

4. Analyze the following sentences: (1) 'The boy that you saw, is my younger brother. (2) One soldier was present, when the roll was called.

##### III. GEOGRAPHY.

(See admission to the Collegiate Schools).

## GENERAL COURSE.

## A CLASS.

## FIRST AND SECOND TERMS.

*Mathematics.*—Wentworth's Arithmetic, beginning with percentage, 5.

*English.*—Grammar and Composition, Harvey's Elementary, Part II, to end, 4 ; three original compositions per term corrected and copied.

*History.*—Eggleston's United States History, 3.

*Latin.*—Jones's First lessons in Latin with references to Gildersleeve's Grammar, 4.

## THIRD TERM.

*Mathematics.*—Wentworth's Algebra, 5.

*English.*—Same as first two terms, 4.

*History.*—Hempstead's History of Arkansas, 3.

*Latin.*—Jones's First Lessons in Latin with references to Gildersleeve's Grammar, 4.

## SUB-FRESHMAN CLASS.

## FIRST TERM.

*Mathematics.*—Wentworth's Algebra. Through quadratics involving one unknown quantity, 5.

*English.*—Meiklejohn's Grammar with six compositions each term, criticized by the teachers and copied by the pupil, 3.

*Chemistry.*—Elementary Course, 3.

*Latin.*—Cæsar, Kelsey or Greenough ; Jones' Lessons and Gildersleeve's Grammar continued, 5.

## SECOND AND THIRD TERMS.

*Mathematics.*—Wentworth's Geometry. Complete Plane Geometry, 5.

*English.*—Same as first term, 3.

*Physiology.*—Martin's Human Body, Briefer Course, with simple experiments, 3.

*Latin.*—Three books of Cæsar completed, 5.

NOTE I.—Students taking the Normal Course will study Swett's Methods of Teaching three hours a week the first term instead of Chemistry, and two hours a week the second and third terms.

NOTE II.—Students in Chemical Course will take, in place of Latin in A class, Physical Geography and Shop work in first term ; Physical Geography, Book-keeping and Shop Work in second term, and Book-keeping and Shop Work in third term in Sub-Freshman class, Chemistry in first term, and History of American Politics and Physiology in second and third terms.

## ENGINEERING AND AGRICULTURAL COURSE.

## A CLASS.

*First Term*—Arithmetic, 5 ; English Grammar, 4 ; United States History, 3 ; Physical Geography, 2 ; Tools and Materials, 2 ; Drawing, 1 ; Shop Work, 2.

*Second Term*—Arithmetic, 5 ; English Grammar, 4 ; United States History, 3 ; Physical Geography and Bookkeeping, 2 ; Carpentry, 2 ; Drawing, 1 ; Shop Work, 2.



*Third Term*—Algebra, 5; English Grammar, 4; History of Arkansas, 3; Bookkeeping, 2; Pattern Making and Moulding, 2; Drawing, 1; Shop Work, 2.

#### SUB-FRESHMAN CLASS.

*First Term*—Algebra, 5; English Analysis, 3; Civil Government, 3; Founding, 2; Drawing, 1; Shop Work, 2; Chemistry, 3.

*Second Term*—Algebra and Geometry, 5; English Analysis, 3; History of American Politics, 2; Physiology, 3; Founding and Forging, 2; Drawing, 1; Shop Work, 2.

*Third Term*—Geometry, 5; English Analysis, 3; History of American Politics, 2; Physiology, 3; Forging, 2; Drawing, 1; Shop Work, 2.

#### SHOP-WORK FOR ALL COURSES IN THE HIGH SCHOOL.

(See I and II, Department of Engineering.)

NOTE 1.—The students in Agricultural Courses take farm work in place of shop work and Drawing.

NOTE 2.—Students in the Manual Training Normal Course have the same studies as Engineering students in "A" Class. During Sub-Freshman year they take Pedagogics instead of Civil Government and History of American Politics.

NOTE 3. Candidates for admission to the Freshman class in the Schools of Engineering and Agriculture will be examined in the above course except the technical work, which will be required after admission. For specimen examinations see page 82.

#### COMMENCEMENT, 1891.

Friday, November 27th, 7:30 p. m.—Garland Society.

Saturday, November 28th, 7:30 p. m.—Concert.

Sunday, November 29th, 11 a. m.—Baccalaureate Sermon by Rev. Dr. J. L. Johnson, of Mississippi.

Monday, November 30th, 7:30 p. m.—Elocution and Physical Exercises.

Tuesday, December 1st, 10:30 a. m.—Competitive Drill; 7:30 p. m.—Philomathean Society.

Wednesday, December 2d, 2:30 p. m.—Battalion Review by the Governor and Trustees; 7:30 p. m.—Mathetian Society.

Thursday, December 3d, 10:30 a. m.—Commencement Annual Address by Hon. J. H. Rogers. Conferring of Degrees by the Governor; 7:30 p. m.—Alumni Address by J. B. McDonough, Esq., of Fort Smith.

#### ALUMNI ANNOUNCEMENT.

At a meeting of the Alumni Association, held December 3, 1891, the following officers were elected:

Lawrence Russell, President, Russellville, Ark.

A. J. Newiman, Vice President, Lonoke, Ark.

L. Alice Patton, Secretary, Viney Grove, Ark.

Annie Waggener, Treasurer, Fayetteville, Ark.

The President was instructed to appoint an Executive Committee to prepare a programme for next Commencement.

## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY.

NAME.	Residence When a Student.	Present Residence and Remarks.
	CLASS OF 1875.	
Botefuhr, Laura D .....	Fayetteville, Ark .....	Mrs. G. W. Schulte, Fort Smith, Ark.
Carson, Ann E .....	Jonesboro, Ark .....	Mrs. John Knight, Jonesboro, Ark.
Carson, Augusta O .....	Jonesboro, Ark .....	Mrs. T. W. Cline, Downey, Cal.
Davis, Lizzie P .....	Bentonville, Ark .....	Mrs. R. C. Brown, Florence, Arizona.
McCart, Eva .....	Fayetteville, Ark .....	Mrs. D. M. Main, Cheney, Kansas.
McKinney, Chas. F .....	Ozark, Ark .....	Traveling Salesman, Ozark, Ark.
Moore, Lucy J .....	Fayetteville, Ark .....	Mrs. Ross, Cincinnati, Ark.
Putnam, Anna .....	Fayetteville, Ark .....	Teacher in Public School, Fayetteville, Ark.
	CLASS OF 1876.	
Barnett, Nettie .....	Fayetteville, Ark .....	Mrs. C. Boles, Fayetteville, Ark.
Gorton, Belle L .....	Aurora, Ill .....	Author, Chicago, Ill.
Gregg, Alfred W .....	Fayetteville, Ark .....	Deceased.
Harris, Agnes .....	Fayetteville, Ark .....	Mrs. Johnson, Kansas City, Mo.
Harris, Sara E .....	Fayetteville, Ark .....	Professor in A. I. U. for several years—Mrs. C. P. Conrad, Kansas City, Mo.
Johnson, Albert P .....	Wesley, Ark .....	Lawyer, Winfield, Kansas.
Neal, W. H .....	Van Buren, Ark .....	Lawyer, Van Buren, Ark.
Taylor, E. L .....	Fayetteville, Ark .....	Farmer, Bentonville, Ark.
Waggener, W. J .....	Farmington, Ark .....	Professor of Natural History, University of Colorado, Boulder, Col.

## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	Residence When a Student.	Present Residence and Remarks.
	CLASS OF 1877.	
Borden, Alice .....	Fayetteville, Ark .....	Deceased.
Carden, E. B. ....	Bloomer, Ark .....	Physician, Mount Holly, Ark.
Hawkins, J. T. ....	Mount Holly, Ark .....	Fayetteville, Ark.
Jennings, Edgar P .....	Fayetteville, Ark .....	Teacher in A. I. U., Fayetteville, Ark.
Massie, Collin .....	Fayetteville, Ark .....	Lawyer, Fort Smith, Ark.
Mellette, W. M. ....	Fort Smith, Ark .....	Deceased.
Simms, W. D. ....	Bentonville, Ark .....	Teacher in A. I. U., Fayetteville, Ark.
Waggener, Annie .....	Fayetteville, Ark .....	Lawyer, Fayetteville, Ark.
Walker, J. V. ....	Fayetteville, Ark .....	Teacher, Fayetteville, Ark.
Watson, Charles A .....	Fayetteville, Ark .....	
	CLASS OF 1878.	
Blakely, Nora .....	Fayetteville, Ark .....	Mrs. H. M. Hudgins, Hot Springs, Ark.
Gregg, Andrew S .....	Fayetteville, Ark .....	Physician, Fayetteville, Ark.
Pettigrew, Thomas A .....	Charleston, Ark .....	Lawyer, Charleston, Ark.
Reed, Maggie .....	Fayetteville, Ark .....	Deceased.
Sutton, William S .....	Fayetteville, Ark .....	Superintendent Public Schools, Houston, Texas.

## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	Residence When a Student.	Present Residence and Remarks.
	CLASS OF	1879.
Butler, H. M.	Varner Station, Ark.	Teacher, Waco, Texas.
Floyd, J. C.	Bentonville, Ark.	Lawyer, Yellville, Ark.
Harrod, J. H.	Lonoke, Ark.	Lawyer, Little Rock, Ark.
Marrs, S. E.	Viney Grove, Ark.	Editor Democrat, Fayetteville, Ark.
Marshall, J. C.	Avoca, Ark.	Lawyer, Little Rock, Ark.
Patton, L. Alice.	Viney Grove, Ark.	Fayetteville, Ark.
Teague, C. V.	Toledo, Ark.	Lawyer, Hot Springs, Ark.
Wood, C. D.	Hamburg, Ark.	Judge Circuit Court, Monticello, Ark.
	CLASS OF	1880.
Droke, G. W.	Bentonville, Ark.	Teacher in Arkansas Industrial University, Fayetteville, Ark.
Johnson, T. M.	Wesley, Ark.	Washington.
King, Artelle Alice	Fort Smith, Ark.	Mrs. J. C. Belt, Brooken, I. T.
Kitchens, T. B.	Jonesboro, Ark.	County and Circuit Clerk, Paragould, Ark.
Langford, W. H.	El Dorado, Ark.	Merchant, Pine Bluff, Ark.
Patton, Mattie J.	Viney Grove, Ark.	Teacher, Viney Grove, Ark.
Ross, T. C.	Fort Smith, Ark.	Lawyer, Fort Worth, Texas.
Russell, Lawrence	Russellville, Ark.	Lawyer, Russellville, Ark., Representative.
Tillman, J. N.	Fayetteville, Ark.	Lawyer, Fayetteville, Ark., Senator.
Williams, Naomi J.	Fayetteville, Ark.	Teacher in Arkansas Industrial University, Fayetteville, Ark.

## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	Residence When a Student.	Present Residence and Remarks.
	CLASS OF	1881.
Carnall, Ella	Fort Smith, Ark	Teacher in A. I. U., Arkansas.
Ellis, F. W.	Fayetteville, Ark.	United States Signal Service, Galveston, Tex.
Moore, J. J.	Vineyard, Ark	Lawyer, City Judge, Helena, Ark.
Reed, Lina	Fayetteville, Ark.	Fayetteville.
Reiff, O. S.	Magazine, Ark	Lawyer, Little Rock, Ark.
Watson, J. J.	Fayetteville, Ark.	Teacher in Australia.
	CLASS OF	1882.
Booth, W. P.	Batesville, Ark.	Farmer, Reyno, Ark.
Brown, W. D.	Newtonia, Mo	Physician, Newtonia, Mo.
Carigan, A. H.	Washington, Ark	Lawyer, Wichita Falls, Tex.
Chausler, C. K.	Washburne, Mo.	Lawyer, Grant's Pass, Ore.
Cherry, W. R.	Patterson's Bluff, Ark	Cashier of Bank, Paris, Ark.
Gregg, L. W.	Fayetteville, Ark.	Lawyer, Fayetteville, Ark.
Hon, Daniel.	Waldron, Ark	Lawyer, Waldron, Ark.
Jones, Gustave	Jacksonport, Ark.	Lawyer, Newport, Ark.
Lanier, J. A. M.	Mountain Home, Ark	Principal Mountain Home Academy, Mountain Home, Ark.
McDonough, J. B.	Bloomer, Ark.	Prosecuting Attorney Twelfth Circuit, Fort Smith, Ark.
McFarlane, W. R.	Enterprise, Ark.	Lawyer, Greenwood, Ark.
Oats, T. F.	Russellville, Ark.	Physician, Mexia, Tex.
Pickel, J. W.	Mulberry, Ark.	Physician for Crystal Plate Glass Co., Crystal City, Mo.
Rogers, P. A.	Rocky Mount, La.	
Shell, G. C.	Augusta, Ark	Lawyer, Lake Village, Ark.



# ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	Residence When a Student.	Present Residence and Remarks.
CLASS OF 1883.		
Bates, C. O.	Cincinnati, Ark.	Professor, Coe College, Cedar Rapids, Iowa.
Cravens, Jessie.	Fayetteville, Ark.	Teacher in A. I. U., Fayetteville, Ark.
England, W. W.	Evansville, Ark.	
Greaves, C. D.	Hot Springs, Ark.	Lawyer, Hot Springs, Ark.
Mayes, J. F.	Fayetteville, Ark.	Merchant, Fayetteville, Ark.
Stroup, Henry.	Webb City, Ark.	Editor, Roseville, Ark.
Taliaferro, Lou.	Bentonville, Ark.	Stenographer, Seattle, Wash.
CLASS OF 1884.		
Anderson, L. S.	Herndon, Ark.	Clerk in Land Office, Washington, D. C.
Duncan, W. H.	Conway, Ark.	Lawyer, Conway, Ark.
Edmiston, W. L.	Springfield, Mo.	Teacher.
Gates, D. A.	Tillar Station, Ark.	County and Probate Judge of Desha County, Arkansas City, Ark.
Goodwin, W. P.	El Dorado, Ark.	Editor, El Dorado, Ark.
Hillis, E. W.	Jonesboro, Ark.	Lawyer, Jonesboro, Ark.
Hudson, J. H.	Dardanelle, Ark.	Teacher and Farmer, Dardanelle, Ark.
Lake, Ella.	Viney Grove, Ark.	Teacher of Music, Tahlequah, Indian Territory.
Reed, G. W. M., Jr.	Fayetteville, Ark.	Lawyer, Los Angeles, Cal.
Taff, J. L.	Waldron, Ark.	Principal Public School, Austin, Texas.

ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY — *Continued.*

NAME.	Residence When a Student.	Present Residence and Remarks.
	CLASS OF 1885.	
Hart, J. C. ....	Dardanelle, Ark. ....	Lawyer, Dardanelle, Ark.
Howell, J. W. ....	Clarksville, Ark. ....	Cotton Buyer, Clarksville, Ark.
Kinsworthy, E. B. ....	Black Colony, Ark. ....	Lawyer, Arkadelphia, Ark.
Notrebe, E. P. ....	Sarassa, Ark. ....	Physician, Booneville, Miss.
Woodall, W. H. ....	El Paso, Ark. ....	President Female College, Lake City, Fla.
Woolverton, C. D. ....	Center Ridge, Ark. ....	Principal Public School, Sheridan, Ark.
	CLASS OF 1886.	
Bates, J. H. ....	Cincinnati, Ark. ....	Lawyer, Corsicana, Texas.
Leverett, Mary ....	Fayetteville, Ark. ....	Teacher High School, Austin, Texas.
Middleton, Mai. ....	Fayetteville, Ark. ....	Mrs. Robert Chasteen, Russellville, Ark.
Mulholland, Sara ....	Fayetteville, Ark. ....	Mrs. J. F. Mayes, Fayetteville, Ark.
Tillar, B. J. ....	Tillar Station, Ark. ....	Lawyer, Little Rock, Ark.

# ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME.	Residence When a Student.	Present Residence and Remarks.
	CLASS OF	1888.
Bowles, Preston	Hancock, Md	W. Va. Central, Elkins, W. Va.
Crozier, Wm. N.	Fayetteville, Ark.	Missionary to China.
Danaher, Mike	Little Rock, Ark.	Law Student, Little Rock, Ark.
Dickson, W. E.	Magnolia, Ark	Teacher, Waldo, Ark.
Drake, N. F.	Cincinnati, Ark	Assistant Geologist, State Geological Survey, Austin, Tex.
Flynn, W. M.	Fayetteville, Ark.	Teacher, Oxford Bend, Ark.
Hobbs, John H.	Bentonville, Ark.	Lawyer, San Antonio, Tex.
Pace, Ida	Harrison, Ark	Teacher, Valley Seminary, Waynesboro, Va.
Polson, Alice	Fayetteville, Ark	S. W. Cy., Mo.
Powell, W. W.	Melbourne, Ark.	Lawyer, Greenwood, Ark.
Schoff, Geo. C.	Annapolis, Md	Adjunct Professor in A. I. U., Fayetteville, Ark.
Treadwell, Lee	Toledo, Ark	Assistant Engineer, J. A. C. Waddell, Kansas City, Mo.
Warren, Geo. A.	Hazel Grove, Ark.	Superintendent Public Schools, Fordyce, Ark.
	CLASS OF	1889.
Aiken, Don C. B.	Fayetteville, Ark.	Engineering Department, Johnson Co., Johnstown Pa.
Fishback, L. F.	Fort Smith, Ark	Law Student, Austin.
Harrison, Grace	Washington, D. C.	Fort Smith, Ark.
McNeeley, John C.	Rackensack, Ark.	Assistant Engineer N. O., N. & Ft. S. R. R., Natchez, Miss.
Obenshain, Ora.	Eureka Springs, Ark.	Teacher, Eureka Springs, Ark.
Slagle, Ida.	Hico, Ark.	Mrs. Gilbreath, Hico, Ark.
Taff, Mary.	Fayetteville, Ark.	Teacher in Blind Institute.

## ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—Continued.

NAME	Residence When a Student.	CLASS OF	Present Residence.
Taff, Albert G .....	Fayetteville, Ark .....	1890.	Deceased, 1890.
Humphrey, Gustavus A .....	Fort Smith, Ark .....		Medical Student, Fort Smith, Ark.
Gannaway, Jno. R .....	Warren, Ark .....		Warren, Ark.
Harvey, F. L., Ph. D .....	Orino, Me. ....		Orino, Me., Professor in Maine Agricultural College.
Hérvey, W. Rhodes .....	Santa Anna, Cal .....		Santa Anna, Cal.
Morrow, Mattie M .....	Fayetteville, Ark .....		Fayetteville, Ark.
Wheeler, Jno. N .....	Warren, Ark .....		Warren, Ark.

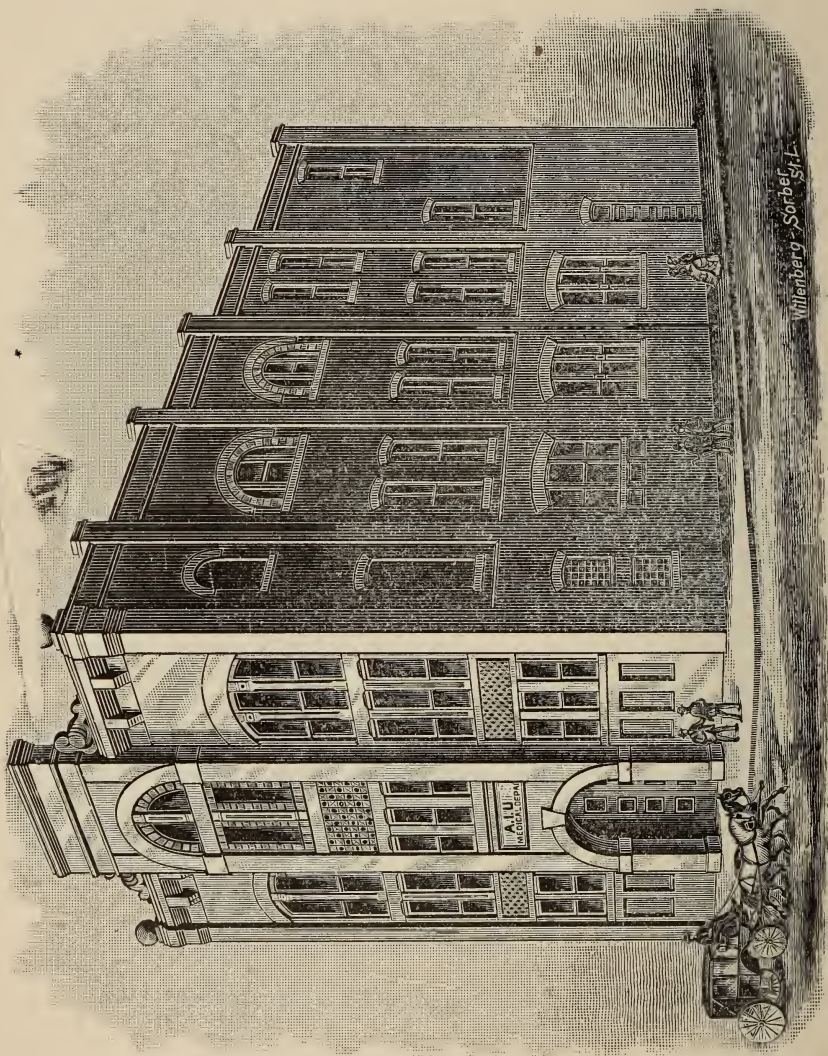
## ARKANSAS AGRICULTURAL EXPERIMENT STATION.

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The Agricultural Experiment Station was established in 1887 by the National Government, and is maintained by it. The object of the Station is to investigate problems relating to agriculture, to ascertain accurate and reliable information by experiments in the field and laboratory, on soils, fertilizers, the diseases of domestic animals, feeds, dairying, etc. The work of the Station is directed to questions that are of the most immediate practical importance to farmers, stock raisers and others. Two branch Stations are established at Newport and Pine Bluff to duplicate and make experiments applicable to the diversity of soil and climate of the State.

The Station undertakes to furnish, as far as possible, information to farmers and others on questions of importance relating to agriculture. Results of experiments are published in bulletins and mailed free to citizens of Arkansas who desire them and make application to the Director.





Willenberg - Sorbely, I.

MEDICAL DEPARTMENT.

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The Board of Trustees of the Arkansas Industrial University, in the spring of 1879, deemed it expedient to establish a *Medical Department*, to be located at Little Rock, the capital of the State. The organization was accordingly at once perfected, a full corps of professors secured, and the first annual announcement of a course of medical lectures, to commence October 7, 1879, was issued to the public.

Since this date an annual course of medical lectures, beginning early in October, and continuing five months, has been given at the Medical College building, situated on Second, between Main and Louisiana streets, Little Rock.

The growth of this branch has been gradual and natural, the first course of lectures, or session of 1879 and 1880, having twenty-two matriculates and one graduate, who had previously attended a course of lectures at another institution, or medical college, while the eleventh course of lectures, or annual session of 1889 and 1890, had seventy-eight matriculates and sixteen graduates, making the sum total of the eleven courses of lectures, or annual sessions, of five hundred and thirty-four (534) matriculates and one-hundred and twenty-five (125) graduates.

The old college building, situated on Second, between Louisiana and Main streets, which had served the purposes and necessity of the Faculty for eleven years, had become, through the growth of the institution, in the steady annual increase of its matriculates, inconvenient and practically inadequate. Therefore, after the close of the course of lectures in the spring of 1890, the old structure was disposed of to the best practical advantage possible, and a new site selected on Second and Sherman streets, and a new and convenient, as also imposing, structure erected, especially adapted to all the purposes and designs of a medical college. This building is three stories high, constructed of brick and admirably arranged for the comfort and

convenience of both students and instructors. It has a large, fine lecture hall, a splendid amphitheatre with chairs, a reading, museum, several private and elegant dissecting rooms, all well lighted and ventilated. In fact, it is a modern and model medical college building, and cost upwards of \$15,000.

The Faculty are all men of acknowledged ability and standing in their profession, and have been untiring in their efforts to advance the interests of this department.

The College is well provided with the necessary charts, models, apparatus, etc., for illustrating each particular subject practically to the eye as to the ear of the student. The supply of dissecting material is ample and at a mere nominal cost, the State having made liberal provision in this particular.

The clinical instruction in this institution is very extensive, embracing almost every disease known to prevail, and every class of accidents liable to occur. These clinics are always practical, and afford superior advantages to students and practitioners to obtain an ocular demonstration of diseases, accidents and their treatment.

For catalogue or special information apply to

R. G. JENNINGS, M. D.,

*Secretary of Faculty.*

Little Rock, Ark.

## THE BRANCH NORMAL COLLEGE.

NUMBER OF STUDENTS, 215.

The Branch Normal College is a department of the Arkansas Industrial University, established pursuant to an act of the General Assembly of the State of Arkansas, approved April 25, 1873, and has been in operation since September 27, 1875. Its primary object is the training of teachers for efficient service in the colored public schools of the State—the law referred to having been enacted with special reference to the “convenience of the poorer classes.” For the purpose of carrying out the intent of the law, by enabling those who wish to avail themselves of its advantages, there is no charge for tuition for appointees; the only requirements for admission being suitable age and qualifications, an appointment from one of the County Judges, and the payment of the entrance fee of five dollars.

## LOCATION, ETC.

The school property consists of a beautiful tract of twenty acres of ground, in the suburbs of Pine Bluff, Jefferson County, Arkansas, and a few rods from the junction of the Little Rock, Mississippi River & Texas and “Cotton Belt” railroads. The school building, completed in 1881, and occupied January 30, 1882, is one of the handsomest educational edifices in the State, as well as one of the best, being warm and comfortable, well lighted and ventilated. It contains one large assembly room, four recitation rooms, and cloak rooms for males and females. The building is of brick, with slate roof and trimmings of Alabama granite, and cost, with improvements and furniture, \$12,000. The furniture and other equipments are of the best modern style.

The Normal Course of Study is not what goes by that name in many of our institutions; that is, a mere preparation for teaching the common branches, but differs from the usual college curriculum merely in the omission of one or two branches of higher mathematics, and having less in Greek.



The first two years of this course are intended to rank as the Freshman and Sophomore years of the usual college curriculum, and the last two years as the equivalent of the Junior and Senior years.

Eight classes have graduated in the institution, and, as will be seen in the list of the Alumni, are now occupying prominent positions in life.

Recently the entire building has been whitened, painted and repaired; new furniture and some new apparatus purchased.

The Reading Room has been fitted up in elegant style and an excellent beginning made toward securing a good library by the collection of about 1000 volumes. It has been supplied with quite a number of valuable newspapers and periodicals, many of which were furnished by their publishers. Among those on file were the *Freeman*, Indianapolis; *Western Appeal*, Minneapolis; *Gazette*, Huntsville; *The Gazette*, Little Rock; *Globe-Democrat* and *Republic*, St. Louis; *The Tyler*, Detroit, Mich.; *Popular Educator*, Boston; *Lippincott's Educational Quarterly*; *American Student*, New York; *Board of Education*, Chicago; *School Journal*, New York; *Weekly Echo*, Pine Bluff; *National Baptist*, Philadelphia; *Southern Review*, Helena, etc.

### THE LIBRARY.

The Library consists of over 1500 volumes, embracing many valuable reference books, such as Appleton's Cyclopædia, Lippincott's Gazetteer, etc. It also has acquired by purchase during the last year a fine collection of the works of standard authors, Shakespeare, Milton, Irving, Cooper, Dickens, Longfellow, Carlyle, Tennyson. The library of the Principal, embracing many valuable text and reference books, including the Encyclopædia Britannica, is also accessible to students. A small collection of minerals, each of which is a typical specimen, and none of which are duplicates, has been procured. During the coming year a valuable supply of apparatus will be added to the educational resources of the institution.



## THE DORMITORY.



FEMALE DORMITORY AND BOARDING HOUSE OF BRANCH NORMAL COLLEGE.

The commodious brick dormitory devoted to the use of female students is occupied under the supervision of the Principal and his wife. Quite a number of female students are accommodated with rooms and board at \$2 per week, payable in advance. These boarders are required to attend to their own rooms, and assist in turn in attending to the table. They are also expected to furnish their own bed linen.

In addition to the regular class exercises laid down in the curriculum of study, there are regular lessons in vocal music which are open to all the students. There are also facilities given for instruction upon the piano, organ, guitar and other instruments.

The meeting of the Normal Choir and Normal Orchestra afford excellent opportunities for practice in both vocal and instrumental music.

The length of the vacation allows advanced students an opportunity to engage in teaching, and a large proportion of their number have done so during the past five years. In nearly all cases they have given good satisfaction, and conduct their schools with a fair degree of success. The Normal students have also assisted in the work of the institution itself as a part of their training.

As a part of their training, the advanced students of the institution assist in the work of teaching.

It will be a great advantage to the institution if the various County Judges will take a special interest in seeing that their counties are represented. The proper blanks for making appointments will be furnished, together with all necessary information, on application to the Principal.

J. C. CORBIN, A. M.,

*Pine Bluff, Arkansas.*









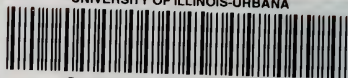








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